

California State Journal of Medicine.

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Communications on subjects of interest to the profession are invited. The "Journal" is not responsible for the views advanced by correspondents. Address letters relating to the "Journal" to the publication office, Room 1, Y. M. C. A. Building, San Francisco.

MAY, 1904.

NOTICE OF REMOVAL.

The Publication Office of the State Society is now established in Room 1, Y. M. C. A. Building, corner Ellis and Mason Sts., San Francisco.

EDITORIAL NOTES.

The address of the outgoing president, Dr. Ellis, contains so much food for careful thought that it is almost unfair to comment upon only a portion of it. **ORGANIZATION AND POLITICS.** Probably the gist of the text on which Dr. Ellis preached so well, may be given as indicated—our duty to the public as represented in the direction of organization enabling us to exert our strength to benefit state and national affairs—politics. Let every man take to heart one sentence: "Whenever medicine has touched politics, politics has been bettered; but whenever corrupt politics has touched medicine, medicine has been smirched." Probably nothing in the whole address is more true nor better good sense than that statement. Think of all the times when you know that corrupt politics has prevented some legislation much needed for the public welfare; think of the number of times that undue influence has been brought to bear to the end that some wise medical act might be overset. Look at the present state of things in Washington, where the biggest and most corrupt lobby that the Capitol has seen for a generation is working against the very thing for which the people are suffering—a pure food and drug law

that will do some good. And this lobby is composed of those who ruin more lives each year than any other class—the nostrum and "patent medicine" manufacturers. Is it not time the doctor got into politics and stayed there? Is it not time that we had more men elected to legislative offices who are pledged to support right legislation? Can you not see your duty, and will you not do it?

The very able Address in Medicine, read at the recent meeting of the State Society by Dr. Rooney, accentuates a point that has been raised in various parts of the State within the past year—the relations between the proposed municipal

PREVENTIVE MEDICINES.

or State laboratory or preventive medicine. One could not ask for a stronger presentation of the case than that furnished by Dr. Rooney. Himself typical of the foremost rank in that great class of physicians—the country practitioner—his words come to us with added weight. Many times, in the history of medicine, common sense and keen reasoning have effected great improvements. But these are exceptional cases. The laboratory, with its near approach to exact science, has been and is bound to be the great agency in advancement, and particularly in the further development of preventive medicine. The country doctor who has much practice and lives up to his unwritten obligations, cannot, in the very nature of things, devote much if any time to laboratory work. He does not suffer, through his natural inability, through the very essential limitations of his environment, but the people do suffer and their suffering is at the cost of the State. For it is the producing people who make the strength of a State and of a country; one hard-working, God-fearing farmer is worth several generations of modern "financiers."

Time was, and not so long ago, that the dividing line between medicine and surgery could be fairly well drawn. But that

SURGERY vs. MEDICINE.

is fast becoming impossible, and each passing year makes the task still harder. Conditions which a few years ago were unhesitatingly classed as medical, are now regarded by the surgeon as well within his own domain. And it is not difficult to see how this should be so. Primarily, it is due to greater accuracy in diagnosis; and secondarily, to more rational and common sense views based upon this more accurate etiology. In the old days dysentery would, unquestionably, be classed as a strictly medical complication. But we have now learned pretty accurately not only its actual cause, but its particular field of limitation, and already is the challenge filed. The Address in Surgery delivered by Dr. J. Henry Barbat at our recent

meeting, published in this number, gives a practically complete resume of the various expressions on the subject up to date, and Dr. Barbat certainly presents the case for the surgeon. In brief, the argument is simple. We have a certain section of the gut which is the seat of trouble due to its infection by organisms that live and thrive upon its normal contents, and which ordinary remedies seem to affect but little. Why not separate this section from the healthy, give this portion of intestine a complete rest, and thoroughly cleanse it from its contamination of germs? The argument is direct and simple; the discussion, in the months to come, should prove interesting.

Under this caption the *Journal of the American Medical Association*, in a recent issue, complains bitterly of the demoralized condition of the drug store to-day. It is too true that the average drug store looks like a department store gone astray, or the wagon of some itinerant.

Commercialism has invaded entirely too much the proper domain of drug dispensaries, and it seems time for concerted action on the part of the medical profession to bring about the necessary reform. Meantime, much may be done to discourage the growing evil if physicians will encourage the filling of their prescriptions at pharmacies where more attention is paid to the proper dispensing of legitimate medicines than at the almost department-store variety shops that maintain a counter for prescriptions, but very evidently consider this an entirely secondary feature of their business.

But why shirk the blame and lay it all on the pharmacist? Who is it that can no longer write a prescription for his patient without "specifying" somebody's preparation, or somebody's mixture? The evil has grown from small things to large, but the pharmacist is not the only one who has nursed it along. The medical profession is quite as much responsible for the degeneracy in pharmacy of the day as is the druggist. It is the doctor who has been for years forcing the pharmacist from his profession into "commercialism," until now at least 75 per cent of the medicine used is ready-to-take mixed stuff which the manufacturer recommends for some line of ills, and the physician knows nothing about. Did the pharmacist commence the delightful game by asking the doctor to "specify" some particular make of chemical, because only one house could make it pure? Did he continue it by asking the doctor to "specify" some manufacturer's "preparation" of a U. S. P., or National Formulary preparation that he could make just as well himself, and at vastly greater profit? Did he further increase his own bad plight by asking the physician to "prescribe" (Heaven save the mark!) some "proprietary mixture" the formula of which the manufacturer did not wish to disclose for commercial reasons? Is

it the pharmacist or the physician who is so densely ignorant of his own profession that he accepts unquestioningly the idle statements that are told him; who does not know that *hexamethylene tetramine* is *hexamethylene tetramine*, even though it masquerades under seven different names? Is it the pharmacist or the physician who is so poorly equipped with information as to believe that different specimens of a chemical, having the same melting point, and in every other known respect the same identical thing, can have different therapeutic qualities? Is the pharmacist the only guilty agent in the prostitution of a noble profession to the ignoble greed of ignorant but unscrupulous manufacturers? Is it the pharmacist who first prescribes some nostrum "in the original package," to avoid substitution (of what, God only knows!) and then realizes that the patient can go to a store and ask for the same thing without first consulting the doctor? There is hardly a pharmacist in the country who would not gladly rid himself of half his stock of clap-trap stuff, if he could; but the physician will not let him, because, forsooth, he does not know enough about his own profession to know what he is using or what he is making the druggist do. It would be an even bet that the very editorial in question was written with a pencil bearing the name of some manufacturer of a "proprietary" medicine, the exact formula of which no one but himself and God can know. A little more talk about "doctors' ethics" would be more to the point. "First take out the beam which is in thine own eye."

If final action has not been taken on the "Heyburn Pure Food and Drug Bill, or H. R. 6295,"

before this issue of the *JOURNAL* reaches you, you should at once write to the Hon. W. B. Heyburn, U. S. Senate, Washington, D. C., and assure him of your hearty approval of this measure. Also write at once to the two Senators from this State and urge upon them the necessity of working for the passage of the bill. At the time of writing there is a fierce fight against it, put up by the manufacturers of secret proprietary medicines, nostrums, etc., and the blenders of bad whisky. The bill is very much the same as the bill that passed the House last year, but got lost in the "celebrated chamber of antiquities," the Senate. It establishes standards for foods and it provides for the proper formulation of standards for drugs and foods, and provides for their maintenance. It furnishes much that the people of the United States need, and that the medical profession has long suffered for. The fight is the fight of decency against unscrupulous greed, dishonesty, charlatanism,

quackery and fraud, and it behooves every self-respecting medical man in the country to make his influence felt.

Many of the better class of manufacturers of pharmaceutical preparations have repeatedly advised the editor that they de-

THE REPUTABLE MANUFACTURERS.

cidedly approve of pure food and drug legislation, such as is now pending in the Senate. This is a pretty good time for them to demonstrate the truth of the claim. Let them exert a little of their strength and influence—for they have plenty of both, and enough money—in counteracting the tremendous lobby now working against the Heyburn bill. A little of the practical politics which they all know so well how to use would fit in very nicely, just about this time, and would be a substantial indication of the truth of their pleasant-sounding words. We believe that many of them are honest in expressing themselves as they do in this matter, but there is a doubt that they will come out into the open and stand for the bill. Gentlemen, will you help us?

In its last issue the JOURNAL printed an editorial referring to this company, and more particularly to its "referee for this

THE EQUITABLE REFEREE CASE.

territory." We were advised that Dr. L. L. Dorr, long a distinguished member of the State Society, had retired from the office of referee and had been succeeded by Dr. W. W. Underhill. As the JOURNAL did not care to make the matter a personal one, no name was mentioned. We are informed by Dr. Dorr that he has not retired, but that Dr. Underhill is working in his office as inspector of risks and alternate medical examiner. The balance of the statement made is acknowledged to be true. The gentleman in question is a graduate in good standing and a member of the Missouri State Medical Association, but he has no license in California. Technically, the law would not apply to such cases; morally, it should, and these large and reputable corporations ought to be the first to live up to the uttermost letter of the statute, for their own protection if for no other reason. We are doing every possible thing to clean up the ranks of the medical profession and to keep them clean, and it is just such concerns that should help in the good work. As illustrative of his good standing, the JOURNAL is advised that the gentleman in question is a member of the A. M. A. In return we would respectfully call attention to the fact that, if he continues to reside in this state, he cannot retain his membership in the Association unless he becomes a member of a county medical society, and to do that he must be a licentiate.

Two things are very apt to be overlooked in considering this question. One is the fact that

MILK SUPPLY OF CITIES.

very few people seem to know or care whether they are getting pure milk or not; it all tastes alike to them. The other is the proper consideration of the producer. Unless all producers can be reached and dealt with, the factor of dishonest competition is bound to discourage the fondest endeavors. With the overwhelming majority of people, price is the one and only consideration involved in a milk transaction. Indeed, it is reported that in the great city of Philadelphia only three hospitals paid the slightest attention to the quality of the milk supplied them; with all the others it was simply a matter of price. When this sort of thing is found to exist in the one place where it should not be dreamed of, what can one possibly expect from the ordinary consumer? Certain fundamental requirements should be legally fixed and enforced upon all producers alike. But further than this, much educational work must be done by the medical profession if we are ever to awake the public to a realization that all milk is not alike, though it may taste so, and that price is not the only consideration—especially where the lives of children are at stake.

It is not very pleasant, when you have treated any one decently, to find that you have been lied to and imposed upon. Also, it is unpleasant to be forced to apologize for having innocently aided at an imposition. The JOURNAL offers its sincere apologies to each and every member of the Society, and to each one of its advertisers. For three months it printed a half-page advertisement that was a lie and a fraud. Fortunately a kind friend who is better posted upon subjects chemical than is any member of the Publication Committee, was good enough to point out the lie. Needless to say, the advertisement has been dropped. The firm indulging in this questionable—or rather, unquestionably dishonest—sort of thing, is the *Gardner-Barada Chemical Co.*, of Chicago. The advertisement was accepted only on the clear written understanding that a truthful formula should accompany it. The formula which these gentry sent in and which was published with their advertisement, proves, on investigation, to be purely mythical. There is no such chemical as "Lithium methaminate," and the best chemists advise us that there cannot exist any such salt, or any other salt, of formalin. The obvious conclusion is that the stuff contains ingredients that are dangerous, or for which the manufacturers are ashamed, and it would seem well for the members of the Society to bear that fact in mind, and to leave this preparation (*Uriseptin*) absolutely alone.

Some confusion seems to have arisen in the minds of a few of our advertisers as to the meaning of an editorial in the last number of the JOURNAL. In that article we condemned the practice of printing "bizarre or grotesque" illustrations, and stated that the things using this sort of spectacular advertising were apt to be pretty poor stuff. There is a lot of difference between a decently gotten up illustrated advertisement of a reputable house and a non-secret preparation, and the sort of stuff that requires skeletons, emaciated men under umbrellas, scrawny hands clutching at swollen feet, infants writhing in pain, and a lot more of that sort of thing. If those who have criticised the JOURNAL for the editorial utterance referred to will be good enough to re-read it, they will probably see that they could not be referred to. So far as we are aware, there is not one of the good houses in the country that indulges in this vicious advertising; nor do they advertise the sort of preparations which would need the bolstering and the forcing of the nature suggested. We are very proud of our advertising pages and of our advertisers; they are first-class, reputable houses, and we have from the first stated it as our policy to print no advertisement of a house for which we could not tacitly vouch. It would be an excellent thing, and a courteous, for the members of the Society to remember this, and to patronize our advertisers as much as possible, whenever such preference may be shown without disadvantage.

The session of the Sanitary Conference held at Paso Robles on Monday, April 18, was a very notable meeting. The attendance was large, and those present took great interest in the subjects presented for discussion. The question of milk supply was thoroughly gone into, the unanimous opinion being that proper measures for control of dairies and milk supply should be carefully drafted and put into effect as expeditiously as possible. In considering this question, the recommendations of the Department of Agriculture should not be overlooked. The Department has carefully studied this matter, and recommends the plan of certification of good dairies and good milk, rather than any condemnatory procedures. Condemnation seldom, if ever, does any particular good. The absolute necessity for a law granting the State Board of Health more extended powers was clearly brought out. At present it can act only in an advisory capacity; it should be given power to enforce its advice. Another question of great importance is that of vital statistics. This matter is in reality more urgent than probably the majority of physicians realize, and will be discussed at some later time. Dr. William LeMoyne Wills, of Los Angeles, was elected president for the ensuing year.

A second year's work has demonstrated the wisdom of placing all the business of the State Society in the House of Delegates and thus relieving the general sessions of everything except scientific work. Never has there been a more harmonious meeting of the Society, and though a great deal of business was transacted, it was done without wrangling and expeditiously. It is to be regretted that all of the county societies were not represented, and the duty of electing some man who is sure to attend the meeting is one that should not be overlooked. The number of societies thus not represented was very small, however, and the fact was evident that keen interest in the Society and its work is felt all over the State. The new constitution and by-laws, practically as recommended by the committee, and with only minor alterations, was adopted, section by section, on the evening of the first day, and the centralization of work ought to prove an advantage and effect a saving of considerable time and labor. The sessions of the house in future will probably not be so long; and it is to be hoped that we will not have to adopt another constitution and by-laws for some time to come.

At Paso Robles there were a number of suggestions in regard to future issues of the Register.

If the members of the Society who have alterations or ideas to suggest to the Publication Committee will kindly write them out and send them to the Committee or to the JOURNAL office, they will be welcomed and carefully considered. It is the sincere desire of the Committee to place in the hands of the members of the Society a book that will be of the greatest benefit and help to them. A number of improvements have already been decided upon and will be incorporated in the next issue. Please do not think that we are averse to criticism; it is the only way in which we can hope to improve.

MEETING OF THE A. M. A.

The next annual meeting of the American Medical Association will be held at Atlantic City, N. J., June 7-10.

The railroads will give special rate of one fare for the round trip from this Coast—two times a week. Inquire of agents for further particulars.

WHAT SHOULD BE THE PHYSICIAN'S POSITION IN THE BODY POLITIC?

PRESIDENT'S ADDRESS.

By H. BERT. ELLIS, M. D., Los Angeles.

Delivered at the Thirty-fourth Annual Meeting of the State Society, 1904.

EACH man, in his time, plays many parts, and the parts which should be played by our profession may well occupy us for a little while.

The logical relation of Medicine to Sociology has very naturally created some peculiar types of fame for physicians. Oliver Wolcott, a signer of the Declaration of Independence, who led in the foundation of Medical Societies and Journals, is better known as a financier. Benjamin Rush, an alienist, clinician, hygienist and hospital reformer, incurred more enmity by his political conduct than he won fame by his medical science and patriotism; he was a signer of the Declaration of Independence, yet, through criticisms of the "little-great" Colonial nobodies of New England, Virginia and Pennsylvania, he created so much offense that the animosity of their descendants still pursues him, so that as yet the National Capital has not his monument.

The quaintest instances of extra medical fame of physicians are found in Guillotin and Gatling, the inventors respectively of the guillotine and the Gatling gun.

It is difficult to say whether Souberbeille owes fame to being a regicide or to his genito-urinary surgery in the domain of bladder calculi. He combatted the crushing of calculi with as much vigor as he opposed the Bourbons; he survived the French Revolution to take part in the movement that placed Louis Philippe on the throne in 1830 as Citizen King. While Souberbeille voted for the death of Marie Antoinette, he insured her better treatment during imprisonment.

It is an open question whether the fame of Erasmus Darwin, the grandfather of Charles, rests more upon his medical treatise, *Zoonomia*, once so great a favorite in the United States, or upon his poetry, still extensively quoted. Keats, who was better known as a poet than a physician, unlike Darwin, never actively engaged in practice. Many physicians who have been as eminent in other fields as in medicine might be mentioned, as for instance, Huxley, Virchow, Wier Mitchell, Hammond and, not to be negligent, our own Bullard.

We have found that knowledge of medicine adds to the efficiency of those possessing it. That it is compatible with many things else—law, preaching, literature, painting, poetry, natural history, exploration, astronomy, invention both in the arts of war and peace, and adds dignity, honor and usefulness to a man in any profession. But a physician who knows nothing and does nothing but his professional work, is ordinarily a poor doctor and is more than likely to be at outs with the whole community. Narrowness of interest creates narrowness of mind, and no vocation needs broader minded grasp than medicine.

Every doctor should have some hobby or recreative employment or study, outside of the mere lucrative side of his profession. Every practitioner of medicine should do more or less politics, and I use politics in its broad sense, that is, to augment the strength and resources of a Nation or State and to protect its citizens in their rights and to preserve and improve their laws. In this sense, the physician may do much politics without being in any sense a party politician, for there is a positive and vital relationship between medicine and the scientific principles underlying social conditions and phenomena. Whenever medicine has touched politics, politics has been bettered,

but whenever corrupt politics has touched medicine, medicine has been smirched.

The relation of social conditions to disease is a topic that is becoming more and more insistent, with the reflections that are the natural accompaniment of advancing knowledge, and it is incumbent upon the physician to give more attention to the public health.

For a doctor to neglect personal attention to civic and political problems is selfish and unjustifiable. His educational advantages, his specific knowledge of sanitary requirements, his trained judgment, his self-restraint and poise in responsible situations, his familiarity with the vagaries of human nature, and the respect shown him by his fellow-citizens, make him eminently qualified for executive work, and even leadership in civic affairs.

The man of education, brains and capability owes a certain part of his day to the community in which he lives, and to the associations with which his personal success and happiness are due. If he does not give it, he is not doing his full duty to mankind. The greater the advantages he possesses, the greater the call to serve his fellow-man. Few men, as a class, have a greater personal capacity than physicians. Therefore, few owe more to the State.

The doctor should aid personally in the endeavor to raise the standard of health, education, art and honesty in the region in which he resides. Time may be required to convince his community that sanitary plumbing, pure water, and compulsory vaccination pay. Men of lower ideals may deny that official dishonesty and public indecency sap the vigor of a village, town or city, and inevitably lead not only to higher taxes, but also to diminished personal safety. These truths may be inculcated while carrying on his daily professional work, and he will find that his life is more valuable to his fellow-man than that of the doctor who, from laziness, carelessness or timidity, neglects his civic duty, under the pretense that his professional work is too exacting to permit such diversion of energy. The doctor's work for the State must have, to be successful, the same quality as his work in medicine. Courtesy and sincerity, honesty and courage, earnestness and intelligence are as essential in the one as in the other. He must be willing in both activities to labor without thought of personal reward.

The membership of physicians on school boards is an undoubted advantage to the public. First, physicians are better able to cooperate and work with the local boards of health, and are therefore better able to demand proper sanitary conditions in school buildings and grounds; secondly, because of the nature of their work, they are better able to comprehend the necessities of the scholars in regard to seating and desks; the tinting of the walls as affecting eye-sight; the necessity for correctly lighted rooms, and that the wall boards should not be black. The physician is in a position to insist that the curriculum shall be somewhat elastic, as all children have not the same mental development or capacity. No one is in a better position to judge of the evil effects of child labor, not from the sentimental, but from the physical standpoint, and therefore he will be in a position to ask for compulsory educational laws, and see that they are lived up to.

There is a feeling abroad, occasionally expressed by physicians and newspaper writers, that there is overpressure in the schools to such an extent that children are falling by the way or are made invalids for life. There is another opinion, expressed quite frequently by opponents of the new education, that teachers are doing too much for their pupils, and are thereby helping to create a race of degenerates. "Soft pedagogics" is the term sometimes given to designate the process. Widely divergent as are these criticisms

of the present practice in the schools, there is perhaps enough truth in both charges, to put teachers on their guard in respect to the demands they make upon their pupils. Viewing the matter solely from the standpoint of health, we may agree that hard, intellectual work of the right kind, done within proper limits of time, can in no way be injurious to children. It must be as healthful for them to exercise the brain actively as it is for them to exercise the legs actively. It is not hard work that is harmful or repugnant to the normal child, so much as work which is not suited to his needs and powers. Of course, a discrimination must be made between the natural tendencies of the child and those tendencies which have been imposed upon him; the former may lead and point the way of the best training, while the latter may indicate the course to be resisted.

What is needed for health's sake is not necessarily to lessen the work of the children, but to lead them to work in such a way and at such times that the largest results in mental strength and alertness will be gained with the least fatigue.

Some study cheers and invigorates, while other study palls upon the mind and wearies it to the point of stagnation. No one will say that the former is nearly so harmful physically as the latter. The two states of mind needed for the physical as well as for the mental wellbeing of pupils are interest and freshness, the former depending largely upon the subject and the way it is presented, and the latter upon the times in which the recitation or study is carried on.

In America, we know sanitation and social progress as the power that condemns rookeries; restricts builders; regulates hours of labor and the age of laborers; builds hospitals, public baths and lodging houses; sets aside great areas for parks and playgrounds; establishes sanitariums for consumptives; inspects factories and mines; defines dangerous trades and prescribes territorial limits to those that pollute streams or air; compels vaccination; certifies physicians, dentists, druggists and barbers; quarantines the sick on land and sea, separating mothers from children; condemning property, if need be; rejects immigrants; enters lodging-houses, and even dwellings, to determine their sanitary condition; prohibits the adulteration of foods and medicines and penalizes the sale or offer for sale of impure foods for man and beast; presumes to name certain fuel as unfit; spends millions for water-works, sewage farms and the support of health departments.

No one community has carried out a consistent and thorough program, but no community has failed to accept the principle that the public has the right and the duty to remove and to prevent disease or conditions that generate disease. We may differ in our theories of disease, or in our belief as to the exact time and place where the public funds shall be used, but we are of one mind that private wealth, private ignorance, private comfort must be of secondary importance, when and where public health is at stake.

Sanitary administration offers a very direct and most efficacious means of reducing the inequalities that even the most conservative capitalist will concede to be incident to our present system of distribution. The meanest wage earner has already come to associate his health with his capital; his lodge, his creditors and his insurance company are emphasizing that relation. None is so mean as not to wish a higher standard of life. Nothing is easier to demonstrate than that wide and clean streets, playgrounds, hospitals, public baths, tenement and factory inspection help to raise his minimum standard with no sacrifice to himself. In no other field have conservative thinkers and communities taken such advanced ground; conversely, no other field offers so little

theoretical opposition or so little prejudice. No other field of administration can demonstrate so quickly and so readily on the platform or by actual test, that there is taxation which benefits without burdening the majority.

In watching contagious diseases in the public schools it is a great advantage to have the Medical Inspector directly under the control of the Board of Education, and not under the Board of Health, since only about one-seventh of the cases of contagious diseases in the public schools are reported by the Health Department. Chicago has a rule that when pupils are out four consecutive days, they are excluded until they have been inspected by the proper authorities. They are not accustomed to admit children upon the certificate of the attending physician, because such certificates they consider utterly valueless, for the reason that physicians cannot easily refuse giving certificates, their livelihood being at stake in many cases.

It is believed that American philanthropists, whose purses have so often and so generously opened to advance the causes of human knowledge and welfare, have failed to appreciate the opportunities which have lain before them in promoting the cause of sanitation. Every school, college and university should have a carefully developed course of hygiene. Every parent who sends a son or daughter to these places of education has a right to expect that this fundamental subject of life and health shall not be neglected. Competent teachers are needed to instruct the children and youth of the land in the practical business of living wholesome and healthy lives. Sanitary engineers are needed to build sewers and water-works, drain lands, and lay out and clean cities in accordance with modern principles. Sanitary architects are needed to build healthy dwellings, hospitals, schools and factories, so that the great class of people who are unable to look out for themselves, shall be suitably cared for. Medical officers of health are needed who shall be familiar with the most recent developments of preventive medicine, and who shall be thereby equipped with the best methods of investigation and removing the cause of epidemics. The family physician should be given knowledge, which, as President Eliot says, shall make him the guardian of his clients in the prevention of disease.

University students are but rarely compelled to study sanitary science, and it is entirely possible for a graduate receiving the highest honors to know next to nothing of the laws of health, upon which his very existence depends. But if school children, teachers and university students find a lack of proper facilities for the study of hygiene, what is to be said of the training of that important class of officials charged with the responsibility of guarding public health? As a rule no training whatever is required of health officers by law, and no provision is made by municipality or State for their instruction.

Excepting in Vermont, and a few other states, it is impossible for health officers to obtain any preparation for their work, except such as they may themselves elect in special courses of instruction in the latest practices in sanitation and preventive medicine. The requirements which must be satisfied before the English degree of D. P. H. is conferred, indicate the character of the training, which, in the opinion of the Committee of the American Public Health Association, it is needful for this class of experts to obtain. As at present constituted, the requirements of the English diploma in public health stipulate that the candidate must be a physician, and have had six months scientific training in hygiene, including sanitary law, sanitary administration, laboratory instruction in sanitary chemistry, bacteriology and the study

of preventive diseases. In addition, he must have served six months as an assistant to a medical officer of health.

Dealing with disease is much more complicated than dealing with crime. Our individual danger is ten times greater from epidemic than from murder, robberies, accidents and fires; yet, as a rule, our police and fire departments excite our admiration, while our squad of health inspectors more often arouse our anger and opposition.

Physicians are said to be deficient in business instinct, training and methods, but much depends upon the individual. There are many so-called business men who seem to know but little about business, if we would judge by the number of failures and those who go out of business.

The entrance of physicians and scientific men into deliberative assemblies must do good, for the increasing accuracy of science cannot fail to make its impress felt in shaping legislative policy. Sanitary and hygienic problems are of ever increasing importance in national life, and physicians have the general training which makes their views on these subjects of much weight. The interests of commercialism and science may seem antagonistic, but in the broadest sense they are not.

It should be almost unnecessary to recount to a society of physicians the numerous reasons why an accurate registration of vital statistics is absolutely essential to the proper sanitary administration of a State. Vital statistics, and especially correct mortality statistics, are fundamental to a progressive public health administration. It is as unsatisfactory to attempt to conduct a public health service, either of a city, a state or a nation, without reliable statistics of mortality based upon the immediate registration of all deaths, as they occur, as it would be to manage a large business enterprise without some adequate system of book-keeping. To know the influence of modern methods of sanitation and prevention of disease upon the public health, the statistics of deaths must be accurately known. The progressive health officer must be upon the alert to watch the movement of mortality from important diseases, and he can only judge of his success at restricting the same by studying variations in mortality and in sickness.

Reliable records of births are almost of as much importance as are those of deaths. The State owes it to the individual citizen that an accurate record shall be made of his birth and his death. Such records are indispensable for many legal purposes. As regards birth records, there is hardly a relation in life, from the cradle to the grave, in which such a record may not prove of the greatest value. For example, in the matter of descent and inheritance; in the relations of guardians and wards; in the disability of minors; in the administration of estates; the settlement of insurance and pensions; the requirements of foreign countries in matters of residence; marriage and legacies; in marriage in our own country; in voting and in jury and military service; in the right to admission and practice in the professions and many public offices, in the enforcement of laws relating to education and child labor, as well as to various other matters in the statutes. As the country becomes more densely settled, and the struggle for existence sharper, many of these matters which have hitherto been of minor significance, will take on a deeper meaning and acquire greater importance.

Nearly every State in the country has attempted to establish a satisfactory system of recording vital statistics, yet up to the present time less than a dozen have adequate laws for the registration of

deaths alone, and I believe that there is not a single State, and probably not even a single city in the United States, that has today a complete registration of births. This should receive the attention and the active support of every doctor in the State, and especially the consideration of our members and our county societies. I therefore recommend to this Society that a committee of three be appointed on vital statistics, to coöperate with the Public Health Committee of the American Medical Association.

The executive business of medical schools, hospitals and societies devoted to medical subjects is what may be, and frequently is, termed medical politics. Here the doctor has frequent opportunity of showing his skill in carrying on business enterprises, and may exercise the talent of leadership. His success is probably equal to that obtained by men of equal ability in any one other walk of life. He may lack the training of one brought up in an office or bank, but his stock of general information, his knowledge of human nature, his judicial mind, and his habit of scientific accuracy, will soon enable him to equal, if not outstrip his non-professional colleague, in executive grasp and precision.

What is essential that the standard of the medical profession be raised and that the physician become a more potent factor of usefulness in the community? Of the students attending professional schools in 1900, 50 per cent of the theological students had an academic degree; 20 per cent of the law students, and only 7 per cent of the medical students. Ordinarily, the degree of preparation one has upon entering a professional school, represents the character of work he will do in that school. One cannot expect to secure physicians wise and comprehensive in diagnosis, keen to discriminate, able to weigh evidence and to relate every fact to every other fact, unless the students who enter the medical colleges are themselves well trained. In professional studies the beginning determines the end, and the end also determines the means and the method: he who is not a good student when he enters the professional school, will not ordinarily be a good student when he leaves it; and if he is not a good student when he leaves the professional school, he will not be a skilful doctor when he begins his professional career. The medical profession, as already indicated, is important not only to the individual life, but also to the life of the whole community. The doctor should become a public servant, as well as a servant of individuals. He is now set not simply to cure the ills of one member of the human race, but also to keep all men from being sick. He is a trustee for the health of the community. He should be the apostle of health and healthfulness. He is an unofficial member of some unofficial board in every community, and in not a few communities, he is a member of the properly constituted Board of Health. The age of specialists has come, but every general practitioner must, in a sense, be a combination of all the specialists. So wide a range of functions, each of which is of peculiar importance, as important at times as is human life itself, makes very evident the proposition that the physician should have the most liberal, the most profound, and the most disciplinary of trainings before he enters upon his professional studies. And further, Americans should be in touch with the best methods of the most advanced nations, and our standards should not be lower than those of European countries.

It would be a distinct advantage to American life, if the students who have stepped from the farm or the grocery store into the medical school, would return to their farms or their counters. Discipline, as well as culture, training as well as intellect, represent

elements which every man who dares to offer himself as the savior of people's lives should possess. One great need of American life at the present time is better trained doctors. The more thorough their training, the better fitted will they be to assume their obligations as citizens in the higher fields of civic usefulness. The mind which has already been sharpened by the methods of one science, takes a keener edge, and that more quickly, when it is put on the whetstone of another science, than does a mind which knows nothing of science, for all sciences are cognate, their methods, though different, are allied. Our profession has been the mother of most of the sciences, and her children are ever coming back to help her. In our art, all the sciences seem to converge—physical, chemical, biological methods join hands to form the complete clinical method.

If the proper organization of physicians existed, a health officer, Democrat or Republican, doing a city such service as to reduce its death rate from 23 to 1,000 per year to 15 to 1,000 per year for successive years, or fighting the dangers of a pest epidemic, would not be turned out of office for partisan reasons, as was recently the case in the city of Buffalo, and our own city of San Francisco.

Very recently Reed and Lydston have clearly pointed out the fact that medical men have fallen from their high estate of bygone years and are no longer looked up to and regarded as the leaders in every community. That much of this change in public attitude toward members of this profession is due to the dissensions within our own ranks, there can be no doubt. The influence which the physician of fifty years ago possessed, has dwindled to a mere shadowy suggestion of influence possessed by the doctor of today. Instead of in any way controlling the quality and standards of the medicines supplied for our use, we are now become very largely the exploiters of such material as the manufacturer cares to place upon the market. Instead of having that representation within Legislative chambers which would insure proper protection of the public welfare, we have little or no representation and comparatively no influence. One of the keenest and ablest lawmakers in the land has said that the medical profession could secure any legislation which it demanded, State or National, if it only knew exactly what it wanted and could agree in making the demand.

The time has come when we must recognize our duty to the body politic; our duty to the people whose servants we are; our duty to our patients; our duty to ourselves and to our progeny; our duty to the coming generation, by taking that place in the affairs of the State and the Nation which good government, good sanitation, good health laws, and proper protection of the public welfare demand. The "Doctor in Politics" must become an established fact and must become a recognized necessity. It is time that at least one Representative from every State in the Union, should be a member of the medical profession, and that there should be a good number of doctors seated in the Senate. We have too long been like the foolish man in the parable, who buried his talent, carefully wrapped in a napkin. Let us dig up these talents of potential strength and influence and invest them as they should be invested—in the political part of our duty to the people we serve. Let us at once begin to work for that place in our State and National Legislatures which the care of the public welfare demands that we should have. To sit quietly back and see inefficient or morally bad men elected to Legislative offices and making laws which are worthless or positively and actually injurious to the public is to neglect that part of our duty which is most essential. The plea that the doctor is too busy to take any part

in politics is an empty phrase. No doctor is too busy to drop a word here, a request there, a hint with another patient, a suggestion to a friend, as he goes about his day's work; and when that day's work is accomplished, and the hints and requests and suggestions are considered, he will realize that much has been done with comparatively little effort.

There are two essential requisites, however, in the perfection of the doctor's influence and position. First, he must be ever a better doctor. A higher standard of preliminary education must be required, and the resultant product of our medical schools must possess a far higher average of general, as well as medical, education. I would recommend that our Committee on Medical Education consider carefully this matter and place itself in close communication with the similar committees of the American Medical Association and with other State Associations, to the end that the matter may be carefully and earnestly gone into and the proper recommendations eventually made. It must not be forgotten that a doctor of fairly good average education today, is relatively far below the standard which he would have held, with no more education, fifty years ago. The general average of education has increased faster than has the standard in our own profession.

The second essential to proper advancement and political recognition is organization. We must have a well and a harmoniously organized medical profession before these many things can be brought about. We must work for the good of all, sinking local feeling, petty ambitions, personal differences and animosities, and sticking close to the central organization and central purpose. Each and every one of us must jealously guard the honor of our profession and the solidity of our organization. Every eligible physician in every county of the State should be a member of a county society and should work with and for his fellow members. The actual conduct of any enterprise must necessarily fall upon the shoulders of a few in committees or boards. But the work of the individual member in aiding such committees is invaluable. When your committee says to you "Write to So-and-so a request to take action on such a matter," it is only after knowing what the full conditions are and what can best be done by your help. Do what you can, remembering that it is always the weight of influence which counts and that if every member of the Society acts, we shall bring to bear the weight of more than 1,500 of the most influential class of men in the State.

If there is, in your county, a physician whom you know is not a member of your County Society, make it your business to see him or write to him and urge that he immediately apply for membership. Do not wait for the Trustees or the Council to do this work, but do it yourself and do it at once. An inconvenient location should no longer be regarded as an argument against joining the Society, for members now receive the publications and are kept in touch with each other and with the work that is being done. And further, even if a doctor is located in a place so distant and inaccessible that he could not attend the meetings of the Society, he could add to its importance in the community by the weight of his influence when it is needed. No man knoweth the day nor the hour that such influence may be essential to the successful termination of some issue intended for the good of all.

Our JOURNAL has done excellent work in prosecuting this work of organization and I commend to you and to your delegates the importance of continuing it in the policy which it has adopted. To the Trustees of the Council I would earnestly urge the necessity of making every endeavor to even more ener-

getically prosecute the work of organization, and to consider ways and means for working upon the physicians residing in counties where there are County Societies, yet who remain non-members of such organizations. The time is here; the work is ready and waiting; our duty is writ plain for every man to read; let us then be cowards no longer; let us turn to the work and do it; let us take that place in the affairs of State and Nation which it is essential we should take.

(Concluded on page 163.)

ADDRESS IN MEDICINE

AT THE THIRTY-FOURTH ANNUAL MEETING OF THE STATE SOCIETY, 1904.

By R. F. ROONEY, M. D., Auburn.

THE honor of having been chosen to deliver an Address in Medicine before this august assemblage of thinkers is a very great one, and I hope that I may not do discredit to the choice of our very worthy president in calling upon myself to fulfill the duty.

I deeply appreciate this mark of his esteem, but fear that my effort may be disappointing to him, and to the members of this Society. I feel that a man chosen from out the members of the profession in one of our larger cities, where the wealth of clinical material is great, and the field for original work is beyond anything at my command, could have given you something of greater interest than I can offer. All that I will do will be to present some old thoughts, clad in new language, that may arrest your attention, and possibly arouse your interest. This I will promise you, and methinks I can already hear the sigh of relief that will punctuate this statement: I will not bore you with a long address. I will not give you a rehash of medical news, or a review of the progress of medicine during the year that has passed since our last meeting. I will not discourse upon the new wizard-metal, radium, that has overturned the very foundation stone of chemistry—the atomic theory—which has proved that the old philosophers' dream of the possibility of transmutation of metals is after all no dream, but a fact; which has opened up a new field for scientific medical research, and has added another great remedial weapon to our armamentarium. I will give you none of these, but will go back and pluck the sword of Preventive Medicine from the dead hand of the Israelite, Moses, the great law-giver and physician of ancient days. We have no better method for the prevention for the spread of leprosy today than the one laid out by Moses, many thousand years ago. Where can you get a better system of camp sanitation than the one promulgated by the same wise ancient for use by the children of Israel whilst traveling through the wilderness? It is because these ancient camp rules are not observed in our modern military, and other camps, that typhoid fever and other filth diseases prevail today. Let me then review the field of preventive medicine, and if I cannot add a single new thought to those already accumulated, (although I hope to do so), it may serve to remind you of some known but neglected methods for the prevention of disease.

How ennobling is the thought that the physician alone, among all professional men, labors night and day to lessen his own gains. At the expense of his own often too meagerly filled pocket, he is constantly reminding and teaching the layman how to prevent the ailments of himself and his little ones. The physician is the first to fly to the rescue when an epidemic threatens. He stirs and awakens the apathetic

public, and forces it to spend its hoarded dollars for prevention instead of cure.

Since the days of Hippocrates, despite the crudities of medicine then taught, practiced and believed in, the higher duties owed to his profession have been recognized by the medical man. Bacon has said: "I hold every man a debtor to his profession; from the which as men of course do seek to receive countenance and profit, so ought they of duty to endeavor themselves, by way of amends, to be a help and ornament thereto." Some few, from greed of worldly gain, may not live up to this standard, but I believe the number to be exceedingly small. The physician, above all other professional men, lives up to the highest ideals, and I believe the country practitioner leads in unselfish effort. The stress and strife of city life, the selfishness and greed of great communities, the striving for position and prestige, blunt the impulses for good in the city practitioner's heart, and lessen his efforts for the public good and the higher interests of his profession. In every country community the physician is looked up to as belonging to an educated profession that renders him more cultured and refined. His words are listened to with respect, and his professional utterances accorded serious and thoughtful consideration. And further, the country practitioner, from the nature of his calling and environment and his need of self-reliance, becomes a close observer and a ready interpreter of his observations. He learns to reason rapidly, and to act quickly. He becomes intimately acquainted with men and motives, and can sway his community more powerfully than can his city brother. See how utterly impotent were the recent efforts of the best medical men in San Francisco against the selfish commercial interests of the public in that city, when trying to defend the place against plague. How different would it have been had a case developed in a small community. Had the respected physician there pronounced a case as plague, the last dollar in the place would have been pledged to properly quarantine the affected premises and prevent the spread of the disease. Further, the physician, better than any other man (possibly excepting the lawyer), becomes better acquainted with his fellow-citizens, attains a deeper knowledge of human nature, and is thereby better qualified, even outside of his medical education, to understand the requirements of a community; whilst his medical and scientific attainments make him an unequalled adviser on questions of public health and sanitation, water supply, plumbing, draining, sewerage, ventilation, schoolhouse construction, etc. He exerts his knowledge to the benefit of the public, and the honor of his profession; but not to his own pecuniary betterment.

As medical knowledge and scientific attainment have increased, the communal value of the physician, the morale of the profession has improved and its conscience has become more strenuous. The young man starting out on his career inherits from his professional forebears many privileges not accorded the layman, and he also inherits correspondingly great duties. It is this unearned inheritance which places the young physician, in the very springtime of his work, under such deep obligation to his profession. Ever solicitous for its good name, he sinks self and works for the public good; or, ignoring his great debt, works but for himself, and sinks to the level of the money-grubber.

I think I am correct when I make the statement that in our entire country there is not a single law upon any of our statute books, that has ever been passed at the instigation of the medical profession, that is not productive of more good to the masses of the people than to the profession itself.

The physician's whole life is but the history of his

accomplishments and endeavors. He starts out full of ambition, high ideals and roseate dreams, and at the end, when the icy hand of Time has pressed upon his head and turned his locks to snow, his dearest possession is the respect of the members of his own profession. Therefore do I appeal to you all to be the more zealous in the prevention of disease, and thus carry on the good work handed on to us by our professional fathers.

Preventive medicine, like all other branches of our art, is making marked advances and keeps fully in step with modern progress. The war upon mosquitoes and rats, for the better protection of the people against malarial diseases and plague, is of recent origin, but has already proved of inestimable benefit. As yet the mass of the profession has not entered into the earnest efforts that should be made against the mosquito. Those living in a malarial district should constantly urge the necessity of warfare against the pest. Thorough drainage of wet lands is the greatest preventive, as it strikes at the very root of the matter. Next comes protection from the bites of the insects, when they cannot be entirely destroyed. A patient suffering from active malarial infection should be carefully guarded by impervious mosquito netting, lest in this stage he be bitten by the *Anopheles* and thus become a source of infection to all whom the mosquito may subsequently bite. I believe any person suffering from active malarial poisoning should be as jealously guarded as a smallpox patient. He is equally as dangerous to the others around him. Wherever mosquitoes exist, no matter how small their number, great pains should be taken to exclude them from sleeping chambers and, as far as possible, from the whole dwelling. No matter if their numbers are so inconsiderable as to cause little discomfort from their bites; their very presence renders every effort to avoid their sting warrantable. Wherever the *Anopheles* is known to exist, netting around the beds of the sleeping is required.

The common house-fly, *Musca domestica*, has been convicted for the spread of trachoma and typhoid fever, and is under indictment for other crimes. I wish to add my testimony against the suspected criminal for the spread of diphtheria and scarlatina. You all know how eagerly the house-fly attacks the secretions of the mouth and nose in these diseases. It needs the most constant and watchful care of the nurse to keep them from the patient. We know that diphtheria appears in the homes of the rich and poor alike; in the palace and the hovel; where the plumbing and sanitation is perfect, and where neither exist; and where no known means of communication can be traced. I believe that an experience of my own might possibly explain the source of infection as coming through the house-fly. In June, 1903, I was called into the country five miles from town, to see a child four years of age, son of a farmer occupying a home well isolated from all neighbors, and with good sanitary surroundings. I found the patient suffering from a severe attack of diphtheria, of over twenty-four hours' standing. Diphtheria antitoxin was administered, and the next morning was given again. I then began an investigation as to the source of the disease. The father and his household, including three farm servants, had been at home without contact with the outer world for a period of two weeks, and the child and an elder sister, the only children on the farm, had not been off the place for the last six weeks. The father had been busy harvesting several hundred acres of hay, hence the lack of contact with the outside world. No discernible reason could be discovered why the disease should have appeared in the place. The child was completely isolated from the rest of the family, but no screens were put upon the

windows. In one week the sister showed membrane in the throat, but one administration of anti-toxin aborted the disease. Soon afterward I learned that diphtheria had existed for several weeks previously in a large family of children some two or three miles away, on the banks of the same small stream that flowed past the home of my patient. The prevailing winds at that time of the year came directly up the stream from the first infected home, and I have no doubt that flies bearing the specific germs, drifted up the ravine, under the impulse of the winds, and carried the contagium. I also believe that the flies were the cause of the second case, as the child and its nurse were completely isolated from contact with the other members of the family.

The following month I was called in consultation with a physician in a town some miles away, to see two severe cases of diphtheria in the children of a family which had just lost a member from the same cause. I found the house unscreened, and the flies holding high carnival around the sick beds. An adjoining house on one side was unscreened, and cases appeared in it later. On the other side was a well screened dwelling, in which were four small children, none of whom were affected; whilst in the next, an unscreened home, three of the family had the disease. Pardon the relation of this personal experience; I give it in hope that it may lead some of you to give the subject personal investigation. In scarlatina, if the insect does not carry the specific poison, it does carry the secondary or streptococcal infection, and should be as carefully guarded against as in diphtheria. That flies carry the contagium of typhoid fever is now universally granted; but are you all fully awake to the fact, and do you take measures against them accordingly? If not, you should be; and should have your typhoid patients, and all their excretions, carefully guarded against these pests.

This leads me to speak of typhoid and its prevention. Do we live up to the scientific knowledge of our day in this disease? It seems not, for out of every one hundred cases sent to our division hospitals in the Spanish-American war, one-half had escaped the diagnosis by the regimental surgeons. It would seem from this that our American medical schools have been doing some poor work in education. Surely no one will accuse the American mind of being too dull to learn to diagnose correctly. What then is the trouble? I believe it to consist in bowing too much to authority. Instead of following natural methods of study, our medical teachers adhere to the old classical descriptions of typical cases of typhoid, when the fact is that a typical case is the rare exception, and not the rule. Typhoid is taught too much and studied too little, and when the unfortunate student graduates, he is in the position very graphically described by one of our American humorists—"He knows too darned much that ain't so." Drop your dogmatic teaching, gentlemen, and go to Nature. And again, I consider it a disgrace to our eminent bacteriologists in our great universities to have had such outbreaks of typhoid as have characterized their histories during the late past all over our nation. Surely these men, many with reputations outside their universities, should be able to detect the bacillus of Eberth in the water or milk supply, before any case of fever arises, and take measures accordingly.

All physicians should, in a doubtful case of fever, depend upon the microscope, for all other symptoms fail. The serum reaction of Widal is fairly reliable, but unfortunately is seldom demonstrable in the early stages of typhoid; whereas, the presence of bacillus typhosus can be detected from the first in any fairly equipped laboratory. Of course, where the physician is without the proper equipment, and both

he and the patient are peculiarly unable to procure a bacteriological report, bad results will ensue. I will have something to say for the correction of this state of affairs at the end of this address.

Once the presence of typhoid is demonstrated, in family, village, town or city, the prevention of further infection becomes the bounden duty of the medical man. Let no sense of modesty or hesitation stand in the way; the doctor must throw himself into the breach in the levee, and endeavor to stop the inrushing tide.

Another class of our patients are not as well protected against preventible ills as they should be: I allude to the pregnant woman. How often does the physician go to the bedside of the woman in labor without ever seeing her throughout her term of pregnancy? This must happen at times through force of circumstances, but need not happen in thousands of instances where it occurs. Generally the husband of the pregnant woman engages the services of the obstetrician, telling him when his services will be required, and going away with the promise of attendance at the needed time; and that ends the matter, until the specified period has elapsed. If the woman is a primipara, and a stranger, what may the physician find? Nay, what may he *not* find, that it was his duty to know long ago? Nephritis, plevic deformities, tumors, too much adipose tissue, and many other ills that called for attention months previously. Never go to a case of obstetrics in the dark as to conditions, when you know that it is coming. Insist upon a previous examination, and see if there be any constitutional, mechanical, or other reason why your patient should not, or cannot bear children, and whether or no there be conditions of health upon which she needs advice. Instruct her as to the care of her health, and how to detect the first signs of impending kidney affection; the care of her breasts; the proper sterilization of her bedding, and all articles that may be used about her at the time of her confinement; and inform her upon all points that the modern obstetrician knows to be necessary. Never take it for granted that the patient has read some household, or other half-baked work on how the pregnant woman should care for herself, because the woman who follows such advice is in poor hands, and more than likely to go wrong. After her delivery, in every case, advise her as to her diet, the care of her breasts so as to avoid mastitis, sore nipples, etc., and do not leave all to the direction of a careless nurse. In fact, be to her what you should be, her "very great comfort in her time of trouble."

To all your patients be never weary in preaching the necessity of asepsis in all wounds, so as to prevent infection, and septicemia. Teach them; in season and out of season, to avoid the use of patent and proprietary medicines, and other nostrums. Thousands acquire drug habits through the use of those containing opium in some of its many forms, cocaine or chloral; whilst many other thousands die from the use of the many headache remedies now upon the market, all containing dangerous amounts of acetanellid and other coal tar products, not to mention other fatal drugs.

Teach the tuberculous patient what he should know. Impress upon him, or her, the necessity of coughing into a handkerchief that thoroughly covers the face; never to spit into anything excepting a proper sputum receptacle; the thorough disinfection of whatever is soiled by the sputum; to keep the hands and face carefully disinfected; to avoid kissing. Teach all these things for the safety of friends and attendants, besides giving advice for the patient's own good.

And I would ask the profession, as one man, to rise up in condemnation of the railway sleeping coach. Radical changes are needed in these to make them

clean and wholesome. Consumptives are continually *in transitu* between all points in the country, but especially is California full of them. Our climate is an attraction to this class of invalids, and all travelers on our railways are in danger. In the sleeping cars we are shut up in a stuffy berth with cushions and blankets that have borne and covered hundreds of tuberculous people without adequate disinfection. Nothing should be used in these coaches that cannot be readily taken apart and thoroughly cleansed; and all woolen material should be abolished, excepting the blankets, and they should be disinfected after every trip.

In conclusion, I would urge upon the medical men of the State that they unite and advocate to the people at large, and especially to our Legislators, the need of establishing a State laboratory for bacteriological and allied purposes. It is said that the average annual income of the members of the medical profession in the United States is about \$700. The average in this State is probably higher—but none too high. If this be so, how many men in the rank and file of the profession can afford microscopes, and other costly equipments for laboratory work? The graduate is educated for the work by our medical schools, but for want of the necessary means at the outset of his career, cannot equip himself properly and has to do without the costly instruments that he needs. After a time the habit of doing without them is formed, and when the time comes that he is able to procure them, the desire to do so has passed away and he does as he has done before—goes without them. Again, how can the busy country practitioner, exhausted with bodily and mental fatigue, crowded with exacting work, and without assistance, gain time to do bacteriological work? He cannot do it, and so it goes undone. In malarial sections of our State the busy man will each day prescribe for and visit from five to thirty patients, in the latter part of summer, supposedly suffering from malarial disorders of various character. I ask you in all seriousness, can he investigate the true cause of ailment in all of these cases? And yet he is supposed to do so, and gets so accustomed to the symptoms by constant familiarity with them, that he seldom fails in making a correct diagnosis. But he meets a case occasionally that he is doubtful about, but from sheer weariness, or lack of equipment, or, mayhap, ignorance of methods he fails to call upon the assistance of the microscope, and serious harm results.

Many country practitioners—yes, and city practitioners also—would like to have laboratory work done, when from the poverty of the patient, and his own shortness of funds, the fee of the bacteriologist stands in the way. For these many reasons, I appeal for a State laboratory. The expense to the people of the State would be trivial, and the benefit at times inestimable. We have the honor of having a member of our profession in the gubernatorial chair at the present time, and could depend upon him to aid such a project with all his power. Consider what this would do for the good of the people, first, and the physician, last. The doubtful case is met, a specimen of blood, sputum, secretion, tissues, etc., is secured and sent to the State laboratory, and a report promptly received. Gentlemen, if we had such a department of our State government, thousands of mistakes in diagnosis could be avoided, deaths prevented, and epidemics curbed in their incipency. Examination of water and food supplies would in many instances stop epidemics that now attain dangerous proportions before proper steps can be taken to stop them. Some states of our Union have already adopted the plan of State laboratories, and California should not be in the rear in adopting modern scientific plans for the protection and safeguarding of its citizens.

THE SURGICAL TREATMENT OF CHRONIC DYSENTERY.

ADDRESS IN SURGERY.

By J. HENRY BARBAT, Ph. G., M. D., San Francisco.

Delivered at the Thirty-Fourth Annual Meeting of the
State Society, 1901.

CHRONIC dysentery, up to recently, has been considered as a disease belonging exclusively to the domain of medicine. The results obtained by medical treatment alone have been found absolutely inefficient in 14% of all chronic cases. The reports from the office of the Surgeon General of the Army show that since the advent of the Spanish-American war there have been admitted to the military hospitals, suffering from chronic dysentery, 4,255 men. The diagnosis was made in the majority of cases between the bacillary form and the amebic form, but no accurate record can be obtained; the large majority, however, being of the amebic type. Of the 4,255 chronic cases, 282 were discharged for disability and 253 died, giving a mortality of 6.66%. Of those discharged for disability, the majority go on suffering for months and years, with frequent exacerbations of the disease, until they die from exhaustion, abscess of the liver or one of the other sequelæ of this disease.

Of those who have been discharged cured, after having been in the hospital for several months, all still show amebæ in the stools, and it will probably be only a matter of time when the slightest error in diet will cause an exacerbation of the disease, with all the attendant miseries. This is the history of the disease. We can scarcely consider an individual cured of a disease when it is likely at any moment, without any provocation, to break out afresh, or to result in abscess of the liver at some future time. Harris states that in chronic cases of amebic dysentery perfect recovery is doubtful. When the disease is due to the Shiga bacillus it is more amenable to treatment, but cases will be met with in which the diarrhea will persist in spite of all treatment.

The pathology of the two forms of dysentery varies somewhat, and accounts for the great difference in the number of chronic cases observed in the different varieties. The ulcers in the bacillary form are as a rule more superficial, and do not involve the deeper layers of the bowel; while in the amebic form the submucous coat is almost always attacked, and, even if the ulcers cicatrize, there will be a large amount of contraction follow. In the bacillary dysenteries, the ulcers, while usually confined to the large bowel, may involve the entire intestinal tract; these cases rarely become chronic, but die in the acute stage. In the amebic form we very rarely find the ulcerations extending above the ileo-cecal valve, and in over 100 cases which came to autopsy only one showed ulcers in the ileum, and they did not extend more than a few inches above the valve. In most cases the ulcerated patches are found in the rectum and sigmoid flexure, and in the cecum, very few being found in the intermediate portion of the colon.

The study of the pathology shows the difficulties which have to be surmounted in effecting a cure in this disease. Medicines taken by mouth are avowedly inefficient in curing cases of chronic dysentery, and applications through the rectum cannot in the majority of cases reach all the diseased areas. These cases, which have resisted the best medical treatment, that I desire to

and recommend surgical measures.

advocated are colostomy, right or

anal anus, and exclusion of the large

intestine, partial or complete. These are not new suggestions, as may be found by examining the literature on the subject. In 1902 Labbey collected all the cases reported up to that time, and Nehr Korn gives a complete resume of cases of chronic ulcerative colitis reported up to April, 1903. He gives excerpts from the histories of 34 cases, but in only two of these is any mention made with regard to the microscopic findings. Both of these cases were due to the ameba coli, all the rest of the cases were considered as dysentery on the clinical symptoms, and in a number of the cases by finding ulcerations in the rectum.

Nehr Korn divides the cases into three groups: No. 1, in which the disease begins acutely and at the end of six or eight weeks must be operated on or the patient will die of exhaustion; No. 2, cases in which the disease begins in a mild form and after several weeks sudden acute exacerbations come on which may destroy the patient; No. 3, cases which have become chronic and have acute exacerbations at greater or shorter intervals, the patient being fairly well in the interim. In the 34 cases reported, 5 died shortly after the operation, rather from their exhausted condition than from the operation itself. Nehr Korn, basing his judgment on the reported cases, believes that left inguinal colostomy is the preferable operation (7 successes and 1 failure), right inguinal colostomy giving 6 successes and 3 failures. He does not believe that primary entero-anastomosis is proper, because it does not allow as thorough treatment of the diseased surfaces as colostomy, but he admits that the cure will be much more effective if the large bowel is excluded after all the diseased surfaces are apparently healed.

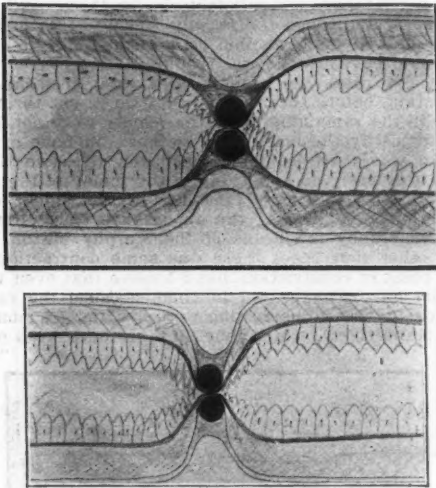
My attention was first called to this subject by seeing a case of chronic amebic dysentery in April, 1900, with Dr. Wm. N. Sullivan, which had been treated for one and a half years without any benefit. I made a right inguinal colostomy, and the immediate result was certainly brilliant. The numerous stools with their accompanying tenesmus ceased instantly, and the patient was able to eat food which had been excluded from his diet for over a year. The colostomy wound was kept open for four months, and then closed by operation, and the patient resumed work shortly after. I have recently learned that some time in 1903 he began to dissipate, and developed an abscess of the liver from which he died, showing that even after four months local treatment through a colostomy wound, we are not sure of having destroyed all the amebæ, and if the bowel is allowed to resume its function, the peristaltic action, coupled with its absorbing capacity, will permit any amebæ which may be present to pass through into the circulation, and cause abscess of the liver.

The second case which came under my care was also a patient of Dr. Sullivan who gave the following history: General health good up to time of enlisting in the U. S. army in April, 1898, at which time he was 21 years old. His health continued good up to September, 1898, when after a short stay in Manila he contracted a violent diarrhea. The stools soon became bloody, and in November of the same year he was in the army hospital at Ermita, P. I., where a diagnosis of dysentery was made, but it is not known whether the bacillus dysenteriae was found or not.

He had relapses in February, May, June and July, 1899, and was finally sent home and mustered out in September, 1899.

After his discharge from the army he placed himself under the care of Dr. Sullivan, and improved considerably; but subsequent violent exacerbations occurred in March and September, 1900, and in April

and May, 1901, the patient never being free from pain even in the interim. While in the Philippines, the bowel movements ranged from 15 to 25 a day, while in America during the attacks from 10 to 15 and in the interim as low as 3 or 4 a day; but during this entire time he suffered from severe pain, especially over the descending colon. The greatest improvement was observed when the patient resorted to rectal injections of solutions of sulpho-carbolate of zinc, cut out all meats, and lived an out-door life;



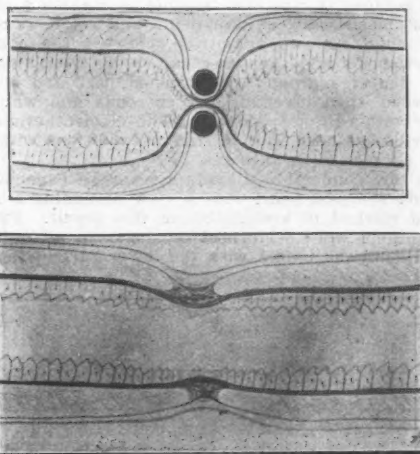
Figs. I and II.—Schematic representations of transit of rubber through intestinal wall. (See Figs. III and IV for continuation.)

but when in May, 1903, he failed to obtain relief from these means, he again consulted Dr. Sullivan, who advised colostomy. The patient entered the hospital on July 26, 1903. His general appearance indicated prolonged suffering, and physical examination showed the body to be much emaciated, heart and lungs normal, but the heart sounds somewhat weak; abdomen flat, palpation showing signs of tenderness over the entire colon, but best marked over the descending portion. The liver and spleen were apparently normal in size. No ulcerations could be detected in the rectum. Examination of the blood by Dr. Ryfkogel gave reds 5,010,000, whites 18,000, hemoglobin 90%. Differential: Neutrophils 78%, lymphocytes 8%, mononuclears 5%, eosinophiles 9 per cent. Clumping reaction with Shiga bacilli positive. The urine showed nothing abnormal except numerous calcium oxalate crystals. Examination of feces showed numerous colonies of bacilli, which could not be morphologically differentiated from the colon bacillus, and eggs of the tricocephalus dispar.

Owing to his exhausted condition it was thought best to use spinal analgesia, and on August 1st the abdomen was opened, the appendix removed and the cecum sutured to the edges of the wound. The bowel was opened on the third day, and the colon flushed out with mild antiseptic solutions, through the colostomy wound. This was repeated daily, varying the program by washing one day through the rectum, and the next through the wound, until the solutions came away clear. An interesting feature occurred on the tenth day, when a live tricocephalus dispar was removed from the colostomy wound. The day

following the opening of the bowel all tenesmus and pain stopped, and the patient began to take nourishment without experiencing the distress which always occurred previously, especially when meats were eaten. Gradual improvement took place for about four weeks, when it was noticed that less discharge was coming from the colostomy wound and more from the rectum, and coincidentally the patient experienced some pain in the left side. This increased for two weeks, and despite the fact that the colostomy wound was enlarged the fecal matter passed by and entered the colon. I then decided to divert the fecal current, and on September 19, 1903, under chloroform, opened the abdomen in the median line and united the ileum, about eight inches from the ileo-cecal valve, to the lower part of the sigmoid flexure, by means of a Murphy button. The intestines were normal in appearance, excepting that the blood vessels were considerably dilated, especially those of the descending colon and the sigmoid. These portions of the bowel felt much thicker than the other portions, but no definite areas of ulceration could be made out, and I therefore concluded that if any had existed they were apparently healed, leaving the mucosa infiltrated, irritable and congested. The colostomy wound was left open in order to observe the effect of the anastomosis. For several days following this operation the patient had severe pain on his left side and back, which required morphine to relieve. I cannot account for this pain in any way except that it resulted from handling the delicate, tender intestine.

The button was passed on the fourteenth day and after that time it was noticed that very little fecal matter was passed through the colostomy wound. By the first of November, 1903, the patient's condition was so good that it was decided to close the colostomy wound, which was done under local anesthesia.



Figs. III and IV.

It was found necessary, after the anastomosis, to use enemata to move the bowels, and the movements were usually formed. Meats, which had been excluded from his diet previous to operation, were resumed without the slightest ill effect, and the patient was able to enjoy his Thanksgiving dinner to the fullest.

When we consider that the formation of abscess of the liver, and the recurrence of dysenteric attacks, is due to the fact that the ameba coli has not been driven from the colon, we can appreciate the necessity of resorting to means which will prevent these terrible sequelæ. The only way to positively get rid of the amebæ is to remove the entire diseased areas of the bowel, before the amebæ have succeeded in passing beyond its limits; but as this is usually impracticable, we must resort to milder measures, even if they are less efficient. The nearest approach to excision of the colon is its complete exclusion. This must not be done unless either one or both ends of the excluded bowel are left open, and sewed into the abdominal wall, because closing both ends of a portion of intestine containing pathogenic materials will produce a rapidly fatal peritonitis.

It has been shown by Kammerer and others that when a portion of bowel has been completely excluded from the fecal circulation its peristalsis ceases, and both absorption and secretion stop after a time; the bowel contracts to a very narrow lumen, and the blood supply diminishes. It can be easily understood then how any inflammatory condition will subside, and necessarily the exciting cause, be it amebic or bacillary, will gradually die out, because we have removed the factors which tend to keep alive these infectious processes. The loss of the large intestine seems to have very little influence on the nutrition of the individual, and usually even the stools lose their liquid character, which they at first assume, and shortly become normal in character.

Next in efficiency to complete exclusion is unilateral exclusion, which is accomplished by uniting the lower part of the ileum to the lower part of the sigmoid flexure or the upper part of the rectum. This may be done by cutting off the ileum about eight inches from the ileo-cecal valve and anastomosing the proximal end into the colon as near the rectum as possible. The distal end is closed by invagination and suture. It may also be done by making a lateral anastomosis between the ileum and colon, crushing the ileum with an angiotribe, between the point of anastomosis and the ileo-cecal valve, tying two catgut ligatures around the crushed part and cutting between, then inverting the cut ends and whipping over with catgut. (Doyen.) The electrothermic angiotribe has been used in similar conditions with perfect success. (Downes.)

In this connection, I made a series of experiments during the past year, with a view of finding a more rapid method of accomplishing this result. Fifteen operations were performed on dogs; in all of them the ileum was united with the lower part of the sig-

the mesentery of the ileum, at a point two inches from the anastomosis, and tied in a single knot over the intestine, completely occluding its lumen. The knot in the rubber was secured by means of a silk ligature in the same manner as advised by McGraw. I had hoped that the gradual contraction would eventually cut the bowel through and close both ends. After the rubber began to cut through the close apposition of the peritoneal surfaces would prevent any infection of the peritoneal cavity, and I expected to find the intestine still in continuity, but with an occluding diaphragm. I am sorry to have to report that my results were not satisfactory. In three cases the rubber cut through too rapidly (inside of 48 hours), and allowed the intestinal contents to infect the abdominal cavity with fatal results.

In five cases the animals died from apparent exhaustion, before the rubber had time to cut through, and in the remaining cases the results were not such as to justify the use of the method. In none of my cases was there complete occlusion. In two there was absolutely no narrowing of the lumen of the gut, and a cross section at the site of the rubber constriction gave exactly the appearance of a circular enterorrhaphy by means of the Murphy button. In the other four cases there was some contraction at the point of constriction, but I believe that even that would have disappeared in time, because the cases which showed no narrowing were five and six months old respectively, while none of the others were over

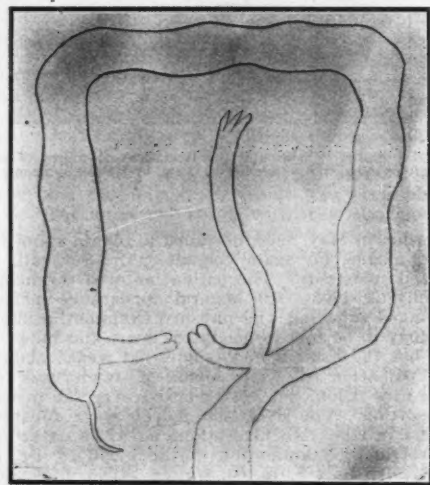


Fig. VI.—Ileo-Colostomy. (Doyen.)

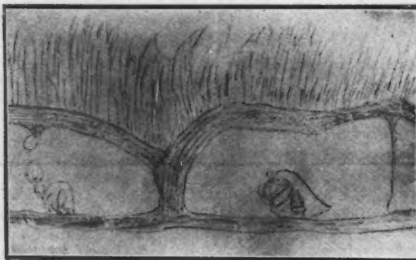


Fig. V.—Drawn from section of ileum six months after using rubber ligature.

moid flexure by means of the Murphy button, making a lateral anastomosis. A piece of rubber cord about two millimeters in diameter was then passed through

three months. The rubber evidently cut its way through the several coats of the bowel, entered its lumen, and was passed *per vias naturales*.

Examination of the various specimens shows that the pressure of the constricting band forced out the mucosa and muscularis from under it, leaving only the peritoneum and submucosa; and that as the rubber cuts through the peritoneum the cut edges unite over the elastic band. This occurs in a similar manner with the submucosa, keeping up the continuity of the intestine. This peculiar state of affairs prevented any union of the submucosa from taking place within the lumen of the bowel on each side of the rubber, as I had hoped. It took from five days to two weeks for the rubber to cut through, the time evidently depending on the tightness of the rubber band.

I believe that the results which I obtained will account for some phenomenal cases of obstruction of the bowel, which have been reported as having recovered without operation. It would be easy to understand how a constricting band, which was causing obstruction, would cut its way completely through the bowel, in the same manner as the rubber, and have the lumen of the bowel restored after a complete obstruction had existed for some days.

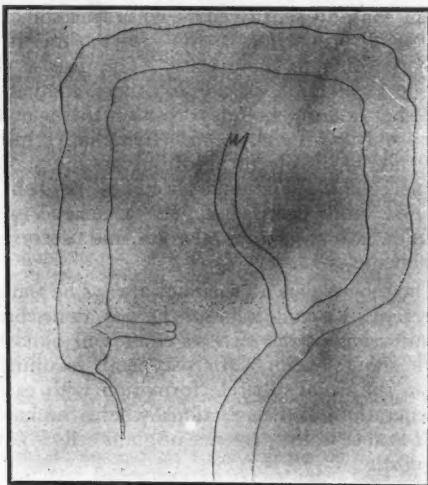


Fig. VII.—Ileo-Colostomy. (Best method.)

In some cases of chronic dysentery the bowel will be found in fairly good condition, and still the patient will have numerous stools with evidence of infection, which has resisted all treatment. In these cases I would advise merely diverting the fecal stream by a lateral ileo-colostomy as in the case reported, but I believe that the best results will be obtained in all cases by making a preliminary colostomy, or, better, drawing a loop of ileum, as near the ileo-cecal valve as possible, into a right inguinal incision and maintaining an artificial anus, with a spur, until all signs of colitis have subsided. If the case has been one of long standing, and there is good reason to suppose that the mucosa of the colon has been destroyed to such an extent that considerable contraction will supervene, we must put that viscus "hors de combat" by one of the means previously mentioned.

Complete rest of the colon can only be obtained by preventing absolutely any fecal matter from passing through it. The ordinary colostomy is not as certain of accomplishing this result as the artificial anus with spur, which keeps all fecal matter from entering the cecum, and enables us to wash out the entire colon as often as we see fit.

Weir's suggestion of using the appendix, which has been fixed in the abdominal wall and the end cut off, in order to wash out the colon, cannot be advocated as equaling an artificial anus, because we will find in most of the cases of chronic dysentery that the appendix has taken part in the disease process, and its lumen has become almost obliterated. In the two patients on whom I operated, I removed the appendices, and it would have been impossible in either of them to have made use of that organ, on account of the extreme narrowness of the lumen.

Furthermore, this method still allows the fecal matter to pass over the diseased surfaces, and is

therefore not to be commended. Primary ileo-colostomy, while it places the colon immediately at rest, does not enable us to treat the diseased parts by direct medication, and it cannot be commended: Complete exclusion, by cutting off the ileum about eight inches from the ileo-cecal valve, and the sigmoid at its junction with the rectum, and uniting the proximal end of the ileum to the upper part of the rectum, then sewing both the other cut ends into the abdominal wall, is an operation which can rarely be performed as a primary measure, on account of the time necessary and the exhausted condition of the patient.

We are therefore narrowed down to colostomy, or artificial anus, as a primary operation, to be followed by one of the others after the patient has sufficiently improved, if the occasion demand. The operation is one of great simplicity, and may be performed in a few minutes under local anesthesia, by making an incision about two inches long over McBurney's point, pulling up the ileum near its junction with the colon, drawing out enough of it so as to be able to pass a sterile rubber catheter of large size through the mesentery, to prevent the possibility of the gut falling back into the abdomen, and to produce a spur. Gauze is packed snugly around the intestine to prevent hernia of other loops, and the operation is completed. It is necessary when the operation has been done in this manner to loosen the bandages and adjust the packing around the loop of gut at least three times in 24 hours in order to allow the gases to pass through the loop. The bowel should be opened on the third day by a transverse incision, cutting through at least three quarters of its lumen. This gives us two openings, one to wash through, the other for the extrusion of the feces.

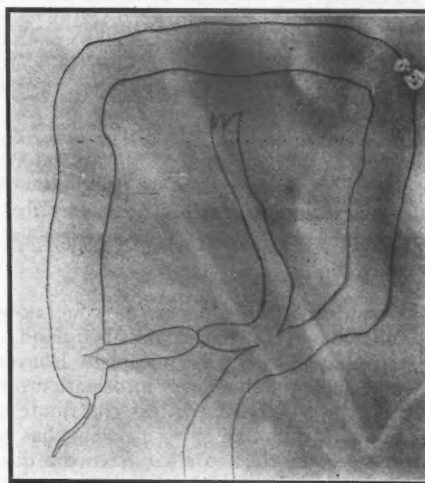


Fig. VIII.—Ileo-Colostomy as done with experimental rubber ligature.

The length of time which these artificial openings are to be kept open cannot be definitely stated; in most of the cases reported the colostomy wounds were not closed for three to twelve months. Judging from the results, I would advise exclusion of the colon in all cases of amebic dysentery which had lasted for more than one year under treatment; the physical condition of the patient determining whether an artificial anus shall be made first, or whether the exclusion shall be the primary operation.

While the surgical measures advocated are not in

themselves curative, they afford us a means of bringing our medicines in contact with the diseased surfaces, and most important of all, they permit us to keep the inflammatory areas at rest, and this will be admitted by the strongest opponent of surgery as being one of the greatest desiderata in any inflammatory condition.

CONCLUSIONS.

A large number of patients with chronic dysentery do not get well under medical treatment alone.

The cases are principally of the amebic type, with prospects of exacerbations, abscess of the liver, contraction of the bowel, and marasmus.

These complications may be obviated in many cases by a timely operation.

The operative procedures are not in themselves particularly dangerous.

The relief afforded is immediate, and will result in cure in many instances.

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TUBERCULOSIS OF MAMMARY GLAND.*

By MYRTLE AP LYNNE, M. D., Napa.

THE subject of this paper, as you know, is tuberculosis of the mammary gland. In selecting this topic for my theme I have not hoped to be able to impart any information on the subject to the society, much less contribute anything new. My motive in so choosing has been somewhat selfish, viz.: to elicit from the discussion that information which I have been unable to obtain from any other source. Yet I do make this one claim of excellence for this paper. It is short.

There does not seem to be much written on the symptoms, diagnosis, etc., of this disease; if so, I have been unable to find it. It is probably true that many of the cases that have been diagnosed carcinoma of the breast, have in reality been tubercular mastitis, just as before the microscope revealed its true nature, lupus was mistaken for rodent ulcer or epithelioma.

Tuberculosis of the breast may occur at any time after puberty; no cases before puberty have been recorded. With regard to infection, it is said to be more or less direct, usually through the milk ducts and often seems to follow lactation remotely. It is frequently bilateral.

The symptoms are such as follow consolidation of the gland, viz.: weight resulting from tissue formation and sensitiveness with spasmodic pain out of all proportion to the growth; this is said to be peculiar to the disease. The disease starts in one lobule and spreads to others, so that several hard, firm nodules result; these nodules move only with the gland. Lymphatics may or may not be involved, according to the stage of advancement. The skin becomes reddish and mottled and early becomes attached to the nodules, which shows serious and deep-seated trouble.

The tubercle bacillus cannot always be found in a section of a nodule or in the pus alone, but an examination of the two together will almost always show bacilli. Microscopical examination shows the usual tubercle formation with caseous degeneration, and in sections where the bacillus itself is absent, the presence of giant cells is almost diagnostic.

There has been some discussion as to whether or no cachexia is caused by this disease when in a purely uncomplicated form; many authorities claiming that cachexia is always due to mixed infection and never to the tubercle bacillus alone, while others still hold the view that there is a true tubercular cachexia. It has been quite well established, however, that this group of symptoms is always due to a mixed infection. The diagnosis is made by the general condition and history of the patient, the distinct, hard, smooth, firm nodules, the immobility of the growth, the attachment of the skin, and the extreme spasmodic pain; the microscope, of course, deciding the diagnosis if the tubercle bacillus be found.

De Costa speaks of a chronic abscess of the breast which is tubercular, as a lump which slowly enlarges and finally ruptures, forming sinuses. The axillary glands are apt to be involved. The patient gives a tubercular history, with history, as a rule, of previous tubercular trouble of various sorts, and has usually borne children. Chronic abscess of the breast causes little or no pain. It may be treated as any cold abscess elsewhere; if small, open it with aseptic care, rub its walls with gauze to remove tubercular masses, irrigate with bichloride solution 1:1000, pack with iodoform gauze and dress antiseptically. It is wise to remove the entire gland and clear out axilla in order to prevent recurrence and dissemination. There was a case of tuberculosis of the breast in an inmate of our Hospital recently,

* Read before the Napa County Medical Society.

which presented some interesting features. The history of the case is as follows:

The patient, Mrs. M., had been apparently well physically, although very insane and violent, until she was vaccinated, which was done the latter part of March, during our late quarantine for smallpox. Nothing was known of the patient's family history.

I did not see her until several weeks after she had been vaccinated as I was not going into the wards, being in charge of the contagious cottage at that time, but the attendant told me afterwards that the arm was very much inflamed and the glands under the arm enlarged. There was nothing surprising in this, however, but soon the attendant noticed what she described as the "vaccination spreading to the breast" and, thinking that there was something wrong, called my attention to it. When I first examined it, the entire breast was considerably swollen and inflamed and presented all the indications of a rapidly developing growth with hard, nodular masses.

The patient was operated upon June 10th by Superintendent Stone. Halstead's operation for amputation of the breast was performed with very thorough extirpation of diseased tissue, and the axilla cleaned out as the lymphatic glands were extensively involved. Rapid recovery followed the operation. The wound healed by first intention, except for about a couple of inches of the incision which gaped on account of the giving way of the stitches. There was considerable tension, and the patient being very violent, managed to work the bandages loose enough to get some motion of the arm the day following the operation. This space, however, rapidly filled in with granulations; the healing was complete and the scar looked healthy.

Later, however, the patient's general health failed rapidly; she developed a cough, became greatly emaciated and died October 13th of general tuberculosis, four months after the operation.

This case had been considered carcinoma by all the assistant physicians, and no question had been raised until Dr. Stone expressed the belief that it might be tubercular and advised a microscopical examination. This proved to be the case, as the microscope showed abundant tubercle bacilli. Two microscopical examinations of the nodules were made, both showing tubercle bacilli, and a short time before the death of the patient an examination of the sputum also revealed the germs in great numbers. The question of the mode of infection in this case is interesting, as suggesting the possibility, or rather probability, of direct inoculation with tubercle bacilli from vaccine lymph. The site of vaccination was at a point where numerous lymphatic vessels drain into the axillary glands which, in turn, are joined by the mammary lymphatics.

Another case which came under my observation, though rather indirectly, as I had little opportunity to study the case, was that of a lady living in San Bernardino who had come to Southern California for her health several years ago. Her family history was markedly tubercular; all her brothers and sisters having died of consumption. She was in very poor health and was probably tubercular at the time she came to California, but had recovered her health to such an extent that she considered herself

out of danger from consumption, although she was never very strong and was often ailing, but was in good flesh and to a casual observer appeared well. She had a severe attack of the grip one year ago last winter and some time afterward several hard nodules formed in the breasts, the disease being bilateral. Both glands were about equally affected. She complained of severe sharp pains at times; was very nervous and complained of general malaise. At the time I saw her she was still in good flesh but looked ill and seemed much depressed. The growths were not extensive; there was no adherence of the skin to the nodules and no discoloration. She told me that her physician feared it might be cancer and advised operation which she was seriously considering, but desired to build up and become stronger before undergoing the operation. I did not see her again. Not long afterward she became worse and died of acute millary tuberculosis. No microscopical examination was made in this case, but it seems evident that the local disease was a part of a general tubercular condition.

In the treatment of tuberculosis of the mammary gland, the question of amputation is of the most vital importance. Complete extirpation of the breast and cleaning out of the axilla should be done in all cases where the patient will permit.

Every attempt to improve the general health and to increase the resisting power of the patient just as in manifestations of tuberculosis elsewhere should be made. The patient should be kept out of doors from early in the morning till four or five o'clock every afternoon, avoiding cold winds and moisture, overheating, etc. Give plenty of nourishing food, as much as the stomach can digest—olive oil, cream, milk, butter and eggs. Plenty of raw eggs given in lemonade to prevent torpidity of the liver, has been highly recommended, and it is said that patients may become accustomed to taking as high as six or eight eggs daily with benefit. The subject of serum and antitoxin treatment is always interesting and alluring, but unfortunately is not, as yet, very encouraging.

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KILLIAN'S RADICAL OPERATION FOR CHRONIC FRONTAL SINUSITIS, WITH DEMONSTRATION OF CASE.*

By A. BARKAN, M. D., San Francisco.

DURING my recent visit in Germany I spent some weeks in Freiburg at Professor Killian's Clinic, where I witnessed Killian's direct method of bronchoscopy carried out by introduction of long tubes through the natural breathing channels into bronchi of the second and third order. The instruments which I brought for the use of the Cooper Medical College are open to inspection and may be utilized by any one of this Society.

Before proceeding with the history of this case, permit me to give a short resume of Professor Killian's method of radical operation for chronic frontal sinusitis. Two publications have appeared on this topic, one from the pen of Dr. Krauss, former assistant in Professor Killian's clinic in Freiburg, the other from the pen of the author of this method himself. Both have appeared in the 13th volume of *Archives of Laryngology and Rhinology*, edited by Professor Frankel, with excellent illustrations of the operative methods. From the beginning it was Professor Killian's endeavor to improve the methods for the cure of chronic frontal sinusitis to such an extent that they could not only lead to a certain cure, but would give the best possible cosmetic result. Of the twelve cases, most interestingly and carefully described by Dr. Krauss, the first one was operated on in '96. Killian had then recognized that only by absolutely sacrificing the anterior as well as the lower wall of the frontal sinus,

ethmoid which are nearly always affected, were rendered accessible. Killian's method, then, calls above all for a perfect resection of the anterior frontal wall. The lower wall of the sinus frontalis, that is the orbital plate of the frontal bone, is also completely sacrificed in all patients. The orbital contents thus take their share in filling up the empty spaces of the sinus and an excellent view may be had of even the most complicated septa and recesses in that region.

The most important part of the method, however, consists in saving the upper edge of the orbit in the shape of a bony margin or crest. This is cosmetically of the greatest importance. By being careful not to remove the periosteum further than the insertion of the tendinous fibers of the trochlear ring, double images can nearly always be avoided.

As it is absolutely necessary in every operation for chronic abscess of the frontal sinus to make a good opening into the frontal cells which are always diseased, a resection of the frontal process of the superior maxillary bone becomes a part of the method. This opens up all the cells of the ethmoid which are nearly always affected; the sphenoid sinus may be reached along this channel. The anterior end of the middle turbinated bone is plainly exposed and can be readily removed and a large communication between the frontal sinus and the nose is established. The nasal mucous membrane must be saved and is utilized in forming a flap to cover the defect. The wound is sutured either immediately or a few days afterwards.

Mr. W. E. S. presented himself at my office. Pus was oozing from the region of the glabella down to the root of the nose. Ten years previously he had noticed catarrhal symptoms. There had been profuse discharge from the nostrils and into the throat, whether in the upright position or lying down. After five years' suffering the amount of discharge was much increased. It was thick, milky and ill-smelling. At times there was severe pain in the forehead. He consulted a doctor in Eureka, who bored a hole into each frontal sinus through the vertical plate of the frontal bone a little to one side of the median line, and about three-quarters of an inch above the eyebrows. Silver tubes were inserted and constantly worn. They were open to the air. For a while all went well, though there was a copious discharge which he kept in abeyance by constant syringing. One year ago the right opening became narrow. The tube could not be put in and it gradually closed. The left side was successfully syringed all the time. Two weeks previous to presenting himself, dull aching set in on the right side, swelling became noticeable at the point of closure, and much pain was experienced for three days. Then perforation ensued, and the fistulous opening re-established itself. Since then the patient has been temporarily relieved, but wished to be definitely cured. The patient was found to be from healthy stock, 35 years of age. On the right side was a red, boggy looking, elevated ridge extending from a point 2 cm. above the nasal process of the frontal bone, upward $1\frac{1}{2}$ cm. At its upper end is a fistulous opening from which foul smelling pus exudes copiously. Exuberant granulation tissue surrounds the opening, which is ragged, having been caused by a spontaneous rupture. Corresponding to this fistulous opening there is one on the left side above the superciliary ridge 2 cm. above the nasal process of the frontal bone 2 mm. in diameter. In it thick pus is seen pulsating. No particular swelling or inflammatory condition around this opening. The nasal mucous membrane is hyperannic. On the right side a spur on the cartilaginous septum touches slightly the lower turbinate. The left side is spacious. Under the middle turbinate on both sides creamy pus is noticeable which pulsates on the right side. The pharynx is normal but coated with a layer of pus. The patient has several bad teeth in the upper jaw. On the right side the posterior bicuspid, on the left side both bicuspid and three molars are bad. The naso-pharynx is comparatively free though the left tube protrudes somewhat. There is some creamy pus seen on the right side, at the base of the vomer. Transillumination revealed the right antrum entirely opaque; left side showed a slight tinge of brightness. Both frontal sinuses transilluminated slightly there being a light area at the point of their artificial openings. The probe passed through the right fistula directly backward 5 cm., where it encountered a very sensitive bony resistance. It passed through the left fistula $4\frac{1}{2}$ cm. until it encountered the same resistance. It passed in a downward direction about 3 cm. The probe can be passed directly backward only, with little lateral leeway. From the nose the probe passed into both frontal sinuses. A catheter could be introduced into the frontal sinus on the right side and solutions injected through the

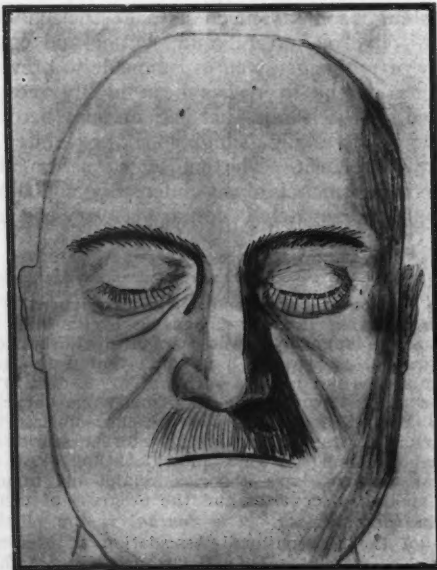


Fig. 1.—Heavy lines indicate incision.

could a certain cure be expected. "Only such a radical proceeding," he says, "is in unison with the principles of modern surgery with regard to the treatment of abscesses in rigid walled cavities." To change a complicated cavity into a flat surface it was necessary to completely obliterate the rigid walled frontal sinus and by making a resection of the process frontalis of the upper maxilla, the cells of the

* Read before the San Francisco County Medical Society.

same passed out both external openings and also back into the nose. The condition of the ears is normal.

On October 2nd, the anterior end of the left middle turbinate bone was amputated and this allowed freer catheterization on that side. October 7th, the anterior end of the right turbinate was amputated. The discharge had freer outlet but continued nearly as profuse. No pus was elicited on syringing the maxillary antra through the natural openings, nor when exploratory puncture was resorted to.

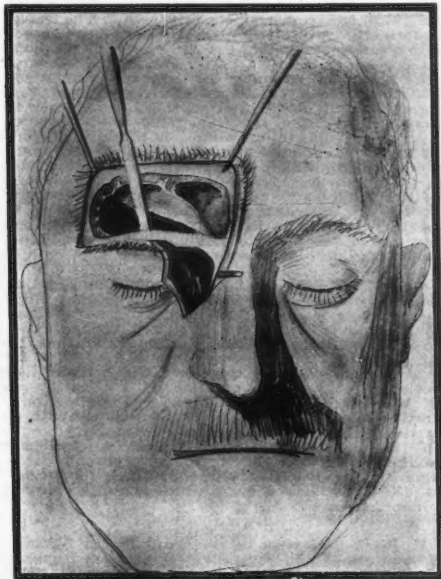


Fig. II.—Showing method of opening sinus on right side and bony bridge.

October 17th, patient entered the Lane Hospital. On the morning of the operation catheters were passed into both frontal sinuses and these were flushed out with boric acid solution. One-eighth of a grain of morphine was injected. Ether narcosis. Post nasal plug was applied under anesthetic and the whole rear part of the nose, and especially the middle meatus, were well tamponed. Anesthetic was now changed to chloroform. The eyebrows were not shaved. The right side was first proceeded with. Incision was made from the external angular process of the frontal bone on the right side through the center of the eyebrow, to its inner end and then carried in a graceful curve, downwards on the frontal process of the superior maxillary bone as far as the lower level of the lower end of the nasal bone. This incision went to the periosteum only. Considerable bleeding was checked with haemostats. The upper limit of the bony ridge was now determined by a cut through the periosteum parallel with the orbital ridge and at a distance of 4 or 5 mm. above it. This cut was carefully made, following closely the orbital margin with the finger. At the inner end this cut was to join with a similar cut on the other side at the base of the nose a few mm. above the upper end of the nasal bone. The periosteum was now elevated and with the overlying integument was drawn upward. The tissue of the brow was loose enough so that the whole sinus on one side could be exposed through this wound. The upper limit of the bridge was then outlined with the chisel and the sinus was entered through the fistulous opening. It was found filled with granulation tissue and pus. A probe was inserted through this first opening to get the dimensions of the sinus to determine how far the periosteum should be reflected, and the limits of safety. The opening was enlarged with chisel and forceps, separating it very carefully from the bony bridge. The sinus was laid bare in its entire extent. The upper and outer angles were smoothed down with chisel and electric bur so that the integument lay flush against the posterior wall. Many small septa separating masses of pus had to be removed, and an enormous mass of stinking material was curetted out. The anterior wall of the sinus was then entirely removed. We now entered upon the second stage of our operation by carrying the original incision so far as it related to its downward curve, through the periosteum overlying the frontal process of the superior maxillary bone, up to near the insertion of the trochlea. The frontal process of the superior maxillary bone was now chiseled

through very carefully. When an opening a few mm. in diameter was made, the nasal mucous membrane was carefully pushed aside and the opening enlarged downward as far as the end of the nasal bone, by means principally of a cutting punch and chisel. The whole frontal process of the superior maxillary bone was thus removed. The nasal bone remained intact. The nasal mucous membrane, now lying as a floor to this quadrilateral window, was turned into a good-sized flap by separating it above and posteriorly. The flap was then drawn inward out of the way. Though the bleeding at this stage was considerable, it did not interfere with the continuance of the operation. A curet was now pushed downward through the ostium frontale into the nose and with this as a guide a wide communication was made with the frontal sinus. We now proceeded with the removal of the orbital roof as far as it formed a floor of the sinus. The upper lid, the orbital tissue and the periosteum lining the orbit were pulled downward and outward, good care being taken not to interfere with the pulley of the trochlea and to protect the orbital contents. With chisel and forceps the bony floor of the sinus, which was somewhat discolored and rather thin, was completely removed. The supra-orbital crest, covered by its periosteum, now stood out in good relief as a bony bridge connecting the root of the nose with the external angle of the frontal bone. A vast communication was thus established between the frontal sinus and the nose, the anterior ethmoidal cells, containing pus, being removed. The posterior cells, filled with pus, were freely curetted, until firm bony resistance indicated the posterior wall of the sphenoidal sinus. The operation was completed by holding the membranous flap outwards, by the introduction upward through the nose and into the frontal sinus, of a rubber tube of large calibre. After cleaning the wound, it was closed with interrupted celluloid sutures. The outer angle for the distance of 2 mm. was left unclosed and a strip of iodoform gauze inserted.

October 18th.—At 8 P. M.: Temperature 99.8°, pulse 100, 1/4 grain of morphine and 1-30 of strychnia; October 19th.—6 P. M., temperature 99.8°, pulse 100; October 20th, temperature 100°, pulse 76; October 21st, temperature 99°, pulse 88; dressing removed and strip of iodoform drainage changed; October 22nd, temperature 99.9°, pulse 76; considerable purulent discharge from the tube; dressing again changed; iodoform gauze saturated with purulent material.

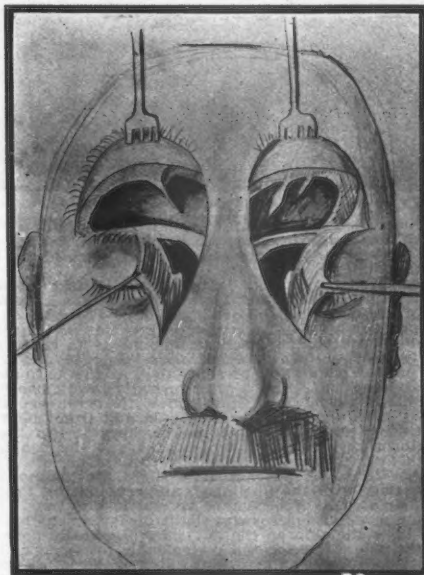


Fig. III.—Showing method of opening sinus on both sides.

October 23rd.—patient was now prepared for operation on the left eye. The counterpart of the operation on the right side was performed. The bone covering the frontal sinus anteriorly was chiseled away up to the point reached on the right side. The operation consumed much less time than the preceding and the wound was closed as before with celluloid sutures.

October 24th.—Returned to ward after operation; pulse 122, fairly strong; 1/4 grain of morphine, strychnia 1-30; whiskey 1/2 dram; vomited small amount of blood; October 25th, after fairly comfortable night, vomited small

amount of bloody mucus; temperature 98.4°; October 26th, temperature 98.0°; pulse 100; patient's stomach would not retain food; peptonised milk per rectum; passed fairly comfortable night; wounds dressed; removed iodoform from both sides, saturated with pus; replaced them by shorter strips; the edema which had been present in the right lid following operation now disappeared; no diplopia; two drops of atropin in each eye; patient expectorates large amount of muco pus; October 27th, temperature 98.4°; pulse 100; edema of left lid still present; stitches removed from right side; wound perfectly healed, except where iodoform drains enter sinus; October 28th, temperature 98°; pulse 92; taking food by mouth and feeling fairly comfortable; October 29th, temperature 98.4°; pulse 80; dressing removed; several stitch-hole abscesses, which did not occur at all in the right side, are present; October 30th, temperature normal; takes nourishment well; dressing done; edema of lid nearly gone; stitches removed; October 31st, slept well and ate well;



Fig. IV.—Patient after operation.

stitch-hole abscesses healed; November 1st, patient up and dressed; temperature normal; November 22nd, tubes and gauze removed and wound closed where gauze drain had prevented union.

November 6th.—Patient left hospital. Large opening from nose into either sinus. Pus present in small amount, and growing daily less. November 10th.—Patient has become practically well. All wounds are closed. There is some discharge but not such an amount as to cause him inconvenience. Is growing daily less.

The patient before you presents then at this date about three and one-half months after operative work has been done, following condition. Subjectively he is relieved after 10 years' constant suffering from pain and from the very embarrassing profuse, ill-smelling discharge. His health has returned. For about two months past he has been at work in the open air, attending to gardens, etc. The discharge from his nose is very slight, yet in no way embarrassing, with the likelihood, as borne out by Professor Killian's case, of becoming normal in due time. Objectively, examination reveals slight disfigurement by the falling in of the skin on the left side, practically none on the right side. But for the unavoidable presence of two large scars caused by the artificial fistulous openings made five years ago over each frontal sinus, the disfigurement would be very slight indeed. As it has been borne out by a subsequent discussion, the general verdict is that, considering the excessively large sinus and the radical features of the operation, the cosmetic result as far as the forehead is concerned, is a good one. Even at this early date there is hardly any trace visible of that part of the scar which lies through the eyebrows on either side, and but a faint line, nota disfiguring one, at that of the incision over the frontal process of the superior maxilla. This bears out in our case to a very remarkable degree, Professor Killian's thoughtful location of the cut not only directly over those parts which give direct access to the

affected sinus, but shaping the curve so that it follows in physiognomic harmony with the other lines of the skin in that region of the face. There is no trace visible of the large defect made by the resection of the frontal process of the superior maxilla. Practically there has been no diplopia at any time. No iritis, no lesion of the orbit and its contents of any kind. We feel satisfied that with due care and minutely following out Professor Killian's directions in this regard, the trochlea can be saved and the annoying symptom of diplopia prevented. Transillumination at this date shows a fair condition of the maxillary sinus, no transillumination as a matter of course in the region of the frontal sinus. The region of the forehead has regained sensitiveness. The sense of smell, formerly severely impaired, has much improved, and with a subsequent slight paraffin injection we hope to make the cosmetic result a better one still. The value of the bony bridge in lessening the deformity, easily saved, easily formed, and as it seems, easily nourished, cannot be overrated. It is at no time in the way of other operative procedures. The removal of the frontal process of the superior maxilla, to our minds, is the most important radical improvement made by the author of this method. For the ease with which one, after having formed a flap of the nasal mucous membrane, can get a view of the middle turbinate bone, and reset it, the directness and ease with which one can deliver the ethmoidal cells in their whole extent, leading up in a natural and safe way to the cleaning out of the sphenoidal sinus. The possibility of overlooking and opening every affected cell so often hidden away in the roof of the orbit in the depth of the ethmoidal bone, makes this part of the operation a most valuable addition to the operative methods of Kuhn and of Ostonberg, which each of them has equal advantages as they have defects, a feature very well brought out by Lermoyez in the discussion on frontal sinus and maxillary antrum operations held before the Section of Laryngology at the Manchester meeting of the British Medical Association in 1902. The operation, if one has prepared himself well on specimens and the cadaver, is one of comparative ease. Work should proceed slowly with good illumination and with the end in view to explore very carefully the cells of the affected sinus, always having in view the clinical fact that in the very chronic cases of this kind the condition of pan-sinusitis is likely to be present. Killian's method is both radical and conservative to an imminent extent.

DISCUSSION.

Dr. K. Pischel.—I wish to congratulate Dr. Barkan on his excellent result. In several cases in which I operated, I had not such good cosmetic results. Professor Killian says that the discharge from the nose lasts only two or three months. In the last few cases it did not last so long because that canal which leads down from the frontal canal is covered with mucous membrane. The lower part should be covered with skin flaps just as we use them in the chronic otorrhoea where we cover the bone with skin flaps. Perhaps it will be possible to make a bone skin flap upwards and downwards after cleaning out the sinus. Cover the surface with skin. It has to be tried and might work. That would of course cause a much better surface and prevent falling in of the skin.

Dr. J. Denis Arnold.—I think that Dr. Barkan is to be congratulated in that he found a case so well adapted for this operation. I do not believe that either Killian or Barkan would recommend so extensive an operation for all cases of sinusitis of the frontal bone. Where there is necrosis, modern surgery suggests that all the bone be removed, and in complicated cases where all this is affected, the operation is well adapted. So far as cosmetic results are concerned, Dr. Barkan had had features to deal with and his success is rather marked. Why originally this patient was so operated on as to leave two external sinuses, is hard to imagine. The first operation must have failed and catheters were then introduced. In all cases in which the lower floor is much involved it seems to me this operation is better than any other less radical operation.

Dr. Cohn.—The result in this case is especially gratifying, as Killian says in another publication, aided by Kelmen in Berlin in 1900, that he would not undertake an operation in cases in which the cavities are large. In this case the size was appalling. Killian himself might have hesitated. Killian was not the first to remove both the anterior and inferior walls of the frontal sinus. Redel was the first who saw the necessity of removing both of these walls. Killian modified it by leaving a bony bridge. That is the essential feature of his operation. I agree that for radical cases this operation surpasses any other. It leaves good cosmetic results.

Dr. Nagel.—I should like to ask whether a bacteriological examination has been made. Of late years affections of sinuses become of great interest to the ophthalmologist. In some cases it is not known why the orbit and its contents are affected by affections of the lateral sinus. Bacteriological examinations are of great interest.

Dr. Gross.—The cosmetic result is very good indeed, considering the difficulties with which Dr. Barkan had to deal, and I might suggest that an injection of paraffin would do away with the remaining deformity.

REPORT OF THE THIRTY-FOURTH ANNUAL MEETING

OF THE

MEDICAL SOCIETY OF THE STATE OF CALIFORNIA

HOTEL EL PASO DE ROBLES, APRIL 19, 20, 21, 1904.

(Reported by Philip Mills Jones, M. D.)

Morning Session, April 19, 1904.

The meeting was called to order by Vice-President Dr. W. H. Flint, Santa Barbara, and the Society then was welcomed to Paso Robles by the chairman of the Committee on Arrangements, Dr. McLennon. This was followed by the annual address of the president, Dr. Ellis, which is published on page 141.

The Address on Medicine, by Dr. R. F. Rooney, and Address on Surgery, by Dr. J. Henry Barbat, will be found on pages following the president's address.

The following telegram was read:

Vancouver, B. C. April 19, 1904.—To Doctor H. Bert. Ellis, President State Medical Society, Paso Robles, Cal.: Hearty greetings to your Society. Best wishes for profitable and pleasant meeting. Kindly convey cordial invitation to your members to be present at meeting of Canadian Medical Association, to be held in Vancouver, August 23 to 26. SIMON J. TUNSTALL, President.

The report of the Memorial Committee, Dr. J. Lambert Asay, chairman, was then read.

MEDICAL EDUCATION AND LEGISLATION.

Afternoon Session.

Dr. H. S. Orme, Los Angeles, chairman, reported for the Committee on Medical Education and Legislation, a synopsis of the report being:

Improvement in medical education in California greater in last twenty-five years than could have been expected. Steps in progress noted. Its present standard satisfactory. The need today is higher preliminary education. Nominal requirements too much relaxed. Proper remedy is to put the matter in the hands of the Board of Medical Examiners instead of the schools, and apply the test before matriculation. This defect is the cause of the inferior standing of the medical, in comparison with the legal and clerical professions. Reciprocity between the States in medical requirements can be brought about by concerted action of State Medical Boards at annual meetings of American Association. Legislation recommended, as asked for by the State Board of Health. Repeal of act creating office of Attorney to State and San Francisco Boards of Health.

Dr. Carl R. Krone, Oakland, in discussion, said that in preliminary education what we need is not a higher average of education in the classes, but rather the more general attainment of a perhaps lower scientific average of the masses. As to better safeguards against the abuse of poisonous drugs, it seems to me that the unlawful possession of the same and the evidences of unlawful use are, or should be, punishable. Evidence could then be more easily adduced, and penalties more readily enforced. When murder is committed with a gun, nobody thinks of accusing the maker or the seller of the weapon, but the one who abuses the same is punished.

Dr. T. C. Edwards, Salinas, said that all efforts toward raising standards of medical education are good. Examinations for license to practice should not include examinations in fundamental or preliminary branches. Examinations should be confined to practical branches and later work. Legislation ought to be easy if we go at the work right. The average country person looks with suspicion upon all proposed legislation. We must make the public see these things right and then they will support us.

Dr. LeMoyné Wills, Los Angeles, said that we have a hard time to convince the dear public of anything,

and cited his experience at Sacramento working for our Medical Practice law.

Dr. Orme said that he had listened with interest to Dr. Krone's suggestion to examine at the end of second year, and this would keep out those not having preliminary education.

Dr. W. S. Thorne, San Francisco, read a paper entitled, "Some Reflections on State Examining Boards," an outline of which is:

All progress is in face of opposition. Medicine no exception. Medicine now occupying important place in all states of life. Importance of examining boards. Their personnel. The preliminary education of applicants. Their examination. The illegal practitioner; his eradication. The definition of the "Practice of Medicine." Report of Board's work for past year.

At this time, Dr. Elizabeth Follansbee, Los Angeles, announced that Dr. Charlotte Blake Brown, the first woman doctor recognized by the State Society, had been operated upon for intestinal obstruction. Dr. Follansbee had wired to ascertain the condition of Dr. Brown and had learned that a second operation was in progress, the result almost hopeless. The president was instructed to wire sympathy from the Society to the family.

Dr. Dudley Tait, San Francisco, opened the discussion on Dr. Thorne's paper, confining himself to certain points regarding the practical application of the law and the legal complications which surrounded the efforts of the Board in prosecutions. Work in San Francisco has resulted in perfecting the machinery of prosecuting illegal practitioners. County Society should be the prosecuting agent. All provisions of the Medical Act should be strictly enforced. Our law has been pronounced by the American Academy of Medicine to be almost perfectly drawn; it goes back to preliminary requirements and does not deal only with examination. Applicants have recently imposed upon the Board. Two schools graduated men who had been there only one or two years, but through a mistake of the secretary were accepted for examination; this was a violation of their affidavit. The only discrimination was unanimously agreed to, and has been only toward some old practitioners. Candidates are never rejected for failure to pass in one subject. Apathy of the profession is very dangerous; the Society should show its approval of the work of the Board.

Dr. Thorne, in closing the discussion, said that the keynote was struck by Dr. Tait when he said the stream could not be purged at its mouth, but only at its source, and our law permits us to go to the source and consider the education of the candidate, and his qualifications.

EYE, EAR, NOSE AND THROAT SECTION.

"Concerning the Varieties and Etiology of Glaucoma," by Dr. Benj. F. Church, Los Angeles, was the first paper in this section, a condensed abstract being:

All conditions of the eye in which there is an increased intraocular pressure are known as glaucoma. Primary glaucoma not an uncommon disease. Inflammatory glaucoma is confined almost exclusively to persons between the ages of 50 and 60. Not so with the chronic form. Under certain conditions the disease may be overlooked. One of the most serious maladies of the eye. The surgeon should ever be on the alert to discover its prodromic symptoms.

Dr. R. W. Miller, Los Angeles, in discussion, said that Dr. Church's was a short, practical paper on a most important subject. The name is used for a condition but little known, but well recognized. Causation but little known, and our classification must be clinical rather than scientific.

Dr. E. M. Wilder, Sacramento, said that in resection of the cervical ganglion, sympathetic system, he had met with but partial and temporary success. Constitutional conditions have been alluded to, and are important; gout, grief, condition of nervous system, are all important factors.

"The Pathology of Glaucoma" was the title of the paper by Dr. W. H. Roberts, Pasadena.

Pathogenesis and pathology closely associated, and considered together. The ciliary body the chief secreting organ of the eye. Snellen's description of the course taken by intraocular fluids. Immediate causes of (a) primary and (b) secondary glaucoma. Evidences of inflammation of sclerotic and uvea, involving scleral emissaries and vortex veins; changes in walls of arteries and veins of retina and optic nerve.

The paper by Dr. A. B. McKee, San Francisco, "Symptoms of Glaucoma," in the author's absence, was read by Dr. B. F. Church, chairman of the section.

Dr. W. B. Stephens, San Francisco, said that glaucoma is still in the field of many speculations. Albumin in the aqueous humor is the most weighty condition; when we have no albumin we have no glaucoma. The action is due to obstructing osmosis, thus preventing proper drainage. Has had but little experience with glaucoma, and especially with secondary glaucoma. He cited two cases of rather unusual interest, pathological examination of which he had not yet concluded.

Dr. W. E. Briggs, Sacramento, regretted that the subject could not be discussed before the general practitioners, who often delayed until too late to do any good. Some good general practitioners diagnose "cataract." But little of the etiology or pathology are known. Diagnosis would seem easy, and simple, yet men of great skill often differ after examination of the same case. Must consider many more than the text-book symptoms. Family history is often of value. Prodromal symptoms are not very valuable or reliable, though should be kept in mind. Trauma should have been given more prominence. He had seen a number of cases where a blow was the exciting cause. Eserin will relieve the pain.

Dr. Benj. F. Church, Los Angeles, said that much investigation is due. The field has not been so fully covered as ought to have been the case.

Dr. R. W. Miller, Los Angeles, said there is often great difficulty in making diagnosis, for many times we suspect glaucoma, but symptoms come and go. No cupping of disk should be done until the disease is far advanced. He cited a case in point where diagnosis could not be definitely determined for some time and cupping appeared only late.

Dr. H. G. Thomas, Oakland, thought tension should be taken almost always, and should be used as a very valuable early indication of glaucomatous tendency. Albumin and arterio-sclerosis go hand in hand and probably exist together.

Dr. C. S. Nagel, San Francisco, urged the great importance of carefully testing the visual field. It does not receive the careful attention it deserves. The young oculist is too often impressed with the causes given him to find an early and partial cupping. The field is not absolutely conclusive of glaucoma, but it can be better relied upon than increased tension. Physiologic tension varies even in fellow eyes. Pathology is but little known. Sympathetic ganglia may offer much hope, after more careful observations are made. Up to 1901, only five such examinations are recorded; thus far giving but little help. All forms of

primary glaucoma are of the same nature. The character of the glaucoma may change in the same individual.

Dr. Fred Baker, San Diego, said we all seemed to agree on all the points raised thus far, and especially the revelations of the ophthalmoscope. When the patient absolutely refuses operation, we should temporize, and leeching at the temple is of great value and should be more often used. He had seen glaucomatous symptoms disappear after use of leeches at temple, but they may reappear.

Dr. Roberts, Pasadena, regretted absence of many papers in the symposium. He cited a case in a student working with sledge on an anvil; a piece of hot metal seared the cornea and the eye could not be fully examined. It was dressed and bandaged. The following day, while weeding, the young man stooped over, and had sudden pain; he was seen in ten minutes. Hemorrhage found to have extended into the anterior chamber and paracentesis urged. He cited another case in which eserine and homatropin, alternating, a drop of each every hour, gave relief; eventual blindness resulted, however.

Dr. N. K. Foster, secretary of the State Board of Health, read a paper on the "Sanitary Needs of the State," in the section of Hygiene Sanitation and Climatology, in which he referred to the inadequacy of existing State Sanitary laws, the need of new laws and of sanitary officers.

The question was discussed by Drs. M. Regensburger, San Francisco, and C. C. Browning, Highlands.

CHEMISTRY AND PHYSIOLOGY.

"Innervation of the Heart With Consideration of Cardiac Stimulants," is the title of a paper read by Dr. O. O. Witherbee, Los Angeles. Drs. C. Krone, Harry M. Sherman, C. W. Murphy and S. J. Hunkin, contributed to the discussion.

Dr. Martin Fischer, Berkeley, read a paper on "Reversible Action of Enzymes."

"A New Chromogenic Air Organism—Bacillus Cyaneus," was the title of Dr. Ethel L. Leonard's paper. Dr. Ryfkogel discussed the paper.

MEDICINE AND THERAPEUTICS.

Wednesday, April 20—Morning Session.

"Observations Upon Sanatoria for Pulmonary Tuberculosis," by Dr. John C. King, Banning.

When properly conducted they are good, but they are not yet perfected. Sanatoria are becoming a fad, and many unethical men are promoting enterprises. No climate is best for all cases, and any climate will suit a certain number of patients. The value of the sanatorium depends upon the doctor who manages it. Sanatorium treatment may be carried on outside the sanatorium. Treat and consider each patient individually. There are two classes—incipient and well marked. The year following an apparent cure is a very critical one, and patients should be very carefully cared for during it.

The report of the Committee on Tuberculosis appointed last year was made, the report taking the time assigned on the program to Dr. Pottenger's paper on "Role of the General Practitioner in the Prevention of Consumption."

There were 2,308 deaths during the year; 161 contracted the disease during the year, outside of San Francisco; 3183 cases were under medical care; only 20 doctors objected to proposed methods for preventing the spread of the disease; opinions of over 1,000 physicians were taken and reported. The official returns show great need for better system of vital statistics. Death rate is 25 per 10,000 for the State, and 32 per 10,000 for San Francisco. All measures to bar out tuberculous are bad and should not be undertaken. Education and careful treatment are the proper measures.

Report was referred to Business Committee of the House of Delegates.

"Healed and Quiescent Pulmonary Tuberculosis with Remarks on Pleural Tubercles," by Drs. George Blumer and A. J. Lartigan, San Francisco.

The papers previously published on this subject refer to healing or latency in pulmonary tuberculosis without strictly defining what they mean by these terms. Definition of what is meant by healed and quiescent (or latent) tuberculosis. Analysis of the authors' 500 cases. Importance of age in relation to healing of tuberculosis processes. Relation of sex to healing. Remarks on the frequency of tuberculosis of the pleura with statistics of 108 cases examined for them.

Dr. Pottenger's paper was then called for and read.

Resume of general conditions and death rate for some years past, notably in New York City; death rate seems to be decreasing. Condition of general health—or the soil for cultivation—is most important factor. No ordinary germs are dangerous to a really healthy individual. Hygienic lives will prevent the spread of the disease; it is easy, through proper living, to protect the well. Education can do much to aid in the work. Notification should be voluntary, and not meddlesome in character. Municipal tuberculosis dispensary urged as important. Early diagnosis and intelligent treatment could save 75 per cent.

Discussion of preceding papers, opened by Dr. George L. Cole, Los Angeles:—I am pleased to see so much interest taken in the symposium on this subject. In Italy, 125 years ago, they were agitating this question of preventing the spread of tuberculosis. The movement dropped, however, and we are but now waking up again. Thinks sanatoria a good fad and ought to be more so. Dr. Trudeau could have done more good in a better climate, in view of the great benefit of his work in the Adirondacks. Tuberculosis of the pleura seems to be benign. Some people seem to be immune and others very susceptible.

Dr. J. H. Parkinson, Sacramento:—Patient and friends must clearly understand the nature of the disease. Education of the public is essential, but very difficult. They believe in the heredity and the contagiousness of the disease. Should show them that all forms of the disease are the same, wherever located. Induce voluntary notification.

Dr. E. Von Adelung, Oakland:—Statistics generally lie, but those of the committee seem to be conservative. Patients do not like to be reported; the importance should be explained to them. Some diseases seem to prepare the soil for tuberculosis, and particularly measles.

Dr. E. A. Follansbee, Los Angeles:—Never allowed a class to depart from her instruction without telling them, "Never say, it's only measles, or whooping cough."

Dr. A. Barkan, San Francisco, considered the system of State dispensaries, as in France and Belgium, very valuable. Tuberculosis of the ear is common. Temporal bone is as often the seat of this disease as any bone in the body. Cases of otorrhea should be examined for tuberculosis.

Dr. E. E. Kelly, San Francisco, said that two points had been overlooked; we must discriminate as to the place where patients are to be sent. Municipal boards should require disinfection of tenement houses when families move out after a death. He cited certain districts in San Francisco where many deaths occurred.

Dr. John C. King, Banning, said that where he lives no patient has died for many years where the room and house had not been disinfected. No law requires this, and there is no health officer.

Dr. George Blumer, San Francisco, thought properly prepared and uncooked statistics were valuable. Heredity being carefully considered, recent studies seem to show but little weight. From 60 to 80 per cent of patients do not show bacilli in sputum until disease is too far advanced to combat.

Dr. Pottenger spoke of early diagnosis and thought careful examination should always give diagnosis to a certainty, and we should not wait for bacilli to appear. There is no special climate; good place, good pure air, good food are the essentials. The doctor in charge is the real strength of any sanatorium. Educate the people to look after themselves and take care of themselves and families. A municipal dispensary would do more good than a sanatorium. Thirty-eight per cent of the houses in a section in New York showed infection, and many cases recurred in these.

"Malarial Nephritis," by Dr. Geo. F. Reinhardt, Berkeley.

Malarial nephritis is not uncommon, but is far too seldom recognized. With quinine as a specific remedy, an acute nephritis of malarial origin can be quickly checked and a possible chronic state of the disease prevented. It is estimated that 3 per cent of all diseases of malaria have nephritis, the percentage being much higher in the estivo-autumnal infections. No particular form of nephritis has been identified as the result of malarial toxins, the pathological findings being that of a diffuse nephritis. The cases of nephritis reported were the results of a malarial

toxemia, as was evidenced by the blood examinations and the prompt relief upon the administration of quinine.

Dr. Walter E. Bates emphasized the fact that it was not the germ, but the antitoxin of the germ that produced the nephritis. In 50 per cent of malarias we have albumin in the urine.

Dr. Reinhardt, in closing, said we should be more careful in our diagnosis and not overlook the possible presence of malaria when we can give such prompt relief.

Dr. George L. Cole, Los Angeles, reported a case of mountain fever of low type.

Had some heart trouble and was told dilatation. Weight, 178 pounds; enlarged cardiac area; urine normal. Was in hospital three weeks; no temperature; no sign of tuberculosis; dyspnea increasing till death. Postmortem showed small tubercles in lungs; pericardial sac obliterated. Other organs showed passive congestion.

Dr. H. G. Brainerd, Los Angeles, never had seen such a case.

Dr. George H. Evans, San Francisco:—These cases are rare and should be carefully looked for. Inspection shows transverse wave moving from left to right.

Dr. George Blumer, San Francisco:—We frequently get Broadbent's sign, in these cases. They are often taken for valvular heart lesions.

"Illustrative Cases of Myelogenous Leukemia: Preliminary Report," by Dr. George H. Evans, San Francisco.

This paper gave a report of three patients suffering from this disease. One died, and a brief autopsy report was appended. Of the other two, one has been symptomatically cured, and the other has been much improved following treatment with the X-ray. The paper presented a summary of some of the recent work on the histogenesis of leukocytes, particularly bearing on this work as related to the disease under consideration, and urges caution lest we mistake temporary improvement for permanent cure.

Dr. George Blumer, San Francisco, thought diminution of white cells might be due to the destruction of degenerated cells by X-rays. This might also account for the chilly sensations, etc. No involvement of lymph glands, in many cases, and simple hyperplasia of the bone marrow does not always cause leukemia. Certain poisons attract leukocytes, and that may be the case here.

Dr. H. A. L. Ryfkogel, San Francisco:—X-ray action is destructive to protozoan life, and it may be so in these cases, for most of the cells are not, as suggested, degenerated.

Dr. Blumer: Protozoa have been described in this disease.

Dr. Evans: If theory of destruction is true we would have proportional decrease of other forms of cells, whereas this is not the case.

"Hydrotherapy in Rheumatism," by Dr. A. J. Sanderson. Correspondence with many places was reported to ascertain general methods.

Dr. E. H. Woolsey, Oakland, discussed the elimination of uric acid and the relief of rheumatism. The man who eats much meat is putting more food for rheumatism into his system than he can eliminate. A purely vegetarian diet will not develop rheumatism.

Dr. R. Crees, Byron Springs, said that there is much confusion over the term rheumatism, and many things are so called that should not be. True rheumatic conditions are not well known.

Dr. Evans said that exercise and baths are often bad when there is cardiac lesion.

Dr. Sanderson said that he avoided the causation intentionally, for it is disputed. He emphasized cold water treatment, for he thinks it better and safer than prolonged hot bathing.

Morning session adjourned at noon, the Section on Pediatrics to be taken up with the section on Ear, Nose and Throat, at the Congregational Church, and the Genitro-Urinary section to occupy the hotel parlor.

On motion, the morning session decided that when it adjourned it should do so in memory of Dr. Charlotte Blake Brown, who died April 19th, at 6:30 p. m.

EYE, EAR, NOSE AND THROAT (Continued).

Afternoon Session.

The paper of Dr. M. W. Fredricks, San Francisco, on "Tonsils as Portals of Infection," was read by title and referred to the Publication Committee.

In the paper of Dr. Jas. A. Black, San Francisco, on "Surgical Treatment of Chronic Tonsillitis," he stated that the disease is best operable by the use of cold wire snare.

"Post-Operative Effects of Tonsillotomy," by Dr. Wm. B. Stephens, San Francisco.

Effects divided into (1) immediate and (2) ultimate. Chief of the immediate are: Hemorrhage, its sources and management; rarity of dangerous hemorrhage; pain; edema; infection. Permanent: Ill effects due to deformity; the function of the tonsil destroyed by disease; its extirpation justified and recommended. Removal of tonsils not always easy. Except for deformities, permanent effects all good. These good effects attributable largely to removal of obstruction as to breathing and deglutition.

Dr. Wm. H. Roberts, Pasadena, thought the tonsillotomy the worst instrument ever devised, and dangerous in hands of inexperienced men. Hemorrhage may generally be controlled by pressure with the finger. Remote effects: general health practically always good. Cited case of boy, very deaf, who before operation could hear but 2 inches; after operation could hear 40 inches; before operation was stupid, and afterward was noted as unusually bright.

Dr. Parker said he had discarded the tonsillotomy, and thinks the Bosworth snare is about the best.

Dr. Brown asked as to the best age to operate.

Dr. A. Barkan, San Francisco, said a few years ago conservatism appeared in connection with this operation. Schwartz a few years ago called attention to the error in removing both tonsils and adenoids at the same sitting. Should not operate for tonsillitis except in hospitals.

Dr. W. A. Briggs, Sacramento, said that a more radical operation than formerly is considered proper now. Operation may be slight, but is always important. Never operate on both tonsils and adenoids at the same sitting. May have considerable fever after operation, especially in children. Hemorrhage may be alarming after use of tonsillotomy; use snare always in adults. Remote effects more considerable than we have believed.

Dr. Rowell, Pasadena, spoke of danger of hemorrhage following guillotine, more than from snare.

Dr. R. W. Miller, Los Angeles, said that hemorrhage is apt to be from anterior pillar.

"Report of Cases Simulating Grave Mastoiditis," by Dr. Fred. Baker, San Diego.

Case diagnosed grip complicated by suppurative otitis media with mastoid symptoms, chills and high temperatures. A blood count showed a septic condition of grave mastoid involvement to be improbable. Case proved to be typical typhoid fever. Other cases showing effect of grip and neuralgic habit in the causation of mastoid symptoms.

Discussion by Drs. Roberts, Briggs, Miller and Barkan.

"The Importance of Chronic Otorrhea, as Viewed by the Life Insurance Companies and the Medical Recruiting Officer," is the title of a paper read by Dr. A. Barkan of San Francisco.

Dr. K. Pischel demonstrated the use of collodium after nose operation. By placing a small fragment of gauze on the wound after removal of a section of the turbinate, and dropping a few drops of collodium on the gauze, while a stream of air is being blown in by an assistant, a hard membrane is formed and this stops hemorrhage.

PEDIATRICS.

"Neurasthenia in Childhood," by Dr. Hubert N. Rowell, Berkeley.

Neurasthenia occurs in childhood more frequently than is generally believed. It is caused indirectly by hereditary nervous taint, and is directly produced by brain-fag, severe nervous shock, social excesses, gastric disturbances and masturbation. It is a neurosis, often with a marked psychical element, as distinguished from hysteria, by nature a psycho-neurosis. Treatment consists of several weeks enforced rest (mental and physical), electricity, forced feeding, massage, hydro-therapeutics, animal extracts, strychnine and arsenic, while of paramount importance is attention to the psychical features of the disease, as to the abolition of the various forms of fear, and the creation of a feeling of self-sufficiency.

Dr. Kate Wilde, Los Angeles, stated that struggle in schools is a great cause of this trouble.

Dr. J. H. Parkinson, Sacramento, said that too infrequently is this condition noted by the general practitioner. He cited a case in child of nervous parents, who was hurt while playing. Spinal tuberculosis was suspected and the child watched; diagnosis was made and under treatment the child recovered. A second attack occurred, which was ignored; was sent to school and got along quite well.

Dr. C. E. Winslow, Bartlett Springs, had noticed a number of cases in children, which he thinks due to overwork in schools.

Dr. Edw. Von Adelung, Oakland, thought a good deal might be due to work in schools, but young scholars are restricted and cannot be much overworked. A child of a nervous mother is apt to be affected, not by inheritance,

but by training and constant suggestion. God help the girl with a nervous mother.

Dr. Charlotte Baker, San Diego, said that many children sent to school are better off than they would be if left at home with nervous mothers.

Dr. Rowell closed by saying he did not wish to asperse the schools, for they are better now than they were. Children need brain exercise. There is too much harping on school straining.

"Complications and Sequelae of Measles," by Dr. J. Maher, Oakland.

Measles is a dangerous disease. Not given the consideration which its importance demands. It often gives rise to dangerous complications, and entails disastrous sequelae. Physicians encourage indifference by their attitude toward it. The principal complications and sequelae, and the causes which generally give rise to them; with suggestions as to their prevention. Why measles is so often followed by whoopingcough and tuberculosis. The relation of measles to broncho-pneumonia, laryngitis, gastro-intestinal disturbances, conjunctivitis, otitis-media, endocarditis and syphilis.

Dr. E. Von Adelung, Oakland, said the usual attitude is one of carelessness toward this serious disease. Contagion is not known, so the problem is difficult. We should advocate medical inspection of schools; they should be visited each day. Measles is too generally regarded as a simple disease, whereas it is a very dangerous one.

Dr. George H. Evans, San Francisco, said broncho-pneumonia with measles has a fatality of 70 per cent. He thought this broncho-pneumonia is often acute tuberculosis.

Dr. J. H. Parkinson, Sacramento, said that the Registrar-General of Great Britain says there are more deaths from measles than all other diseases of childhood.

Dr. Fred Baker, San Diego, cited the case of his brother who lost four out of six children from measles.

Dr. S. J. Hunkin, San Francisco, thought the chance of having measles twice is very remote; other eruptions are quite similar; generally there may be two, three or four attacks of other things which might be called measles. Many cases of tuberculosis in the bone have been observed as following measles.

Dr. H. G. Thomas, Oakland, and Dr. C. E. Winslow, Bartlett Springs, also discussed the points raised.

Dr. K. Pischel, San Francisco, said the physician should inspect the ears every day, and do prompt paracentesis if fluid be found in the cavities; this may prevent serious ear trouble.

Dr. Maher, in closing, said that the general opinion is that the disease is dangerous.

GENITO-URINARY.

"Contribution to the Study of Varicocele," by Dr. Dudley Tait, San Francisco.

Historical data. Etiology; role of cremaster; pathologic data; varieties; frequency; operative treatment; its propriety. Arguments against resection of the veins. Resection of the scrotum. Necessity for a simpler method in the treatment of a benign condition; clinical and experimental data concerning a new operative procedure. Operative indications in varicocele.

"Aseptic Catheterization of the Urinary Passages," by Drs. M. Krotoszyner and W. P. Willard, San Francisco.

1. Preparation for catheterizing. 2. Catheters; modes of sterilizing; effect on catheters; time required; methods of keeping sterilized catheters sterile. 3. Cystoscope; sterilization. 4. Lubricants; variety; aseptic and lubricating properties of those adapted to the cystoscope. 5. Conclusions.

"Technic of Genito-Urinary Examination," by Dr. Geo. L. Eaton, San Francisco.

Examination of a subject with acute gonorrhea or other urogenital disorder. The technic of microscopic and macroscopic examination of urinary sediments, prostatic and vesicular secretions. Therapeutic suggestions.

"Fistulae of the Male Urethra," by Dr. R. L. Rigdon, San Francisco.

"Report on Some Renal Tumors," by Dr. Harry B. Reynolds, San Francisco.

History of two cases. General consideration of symptomatology and diagnosis of renal tumors. Value of hematuria, cystoscopy and improved technic in palpation.

SURGERY AND ANATOMY.

Thursday, April 21—Morning Session.

Dr. Emmet Rixford, San Francisco, read a paper on "Inflammation of Appendices Epiploicae."

Report of two cases. Probably a rather common condition: Due in most cases to formation of false diverticula in wall of the colon at point of penetration of blood vessels. These diverticula are far more common in the pelvic colon than elsewhere, and are especially frequent in those suffering with chronic constipation. May give rise to troublesome adhesions, localized abscess and, in rare instances, of rupture, to peritonitis. May simulate appendicitis (left sided) or malignant tumor of intestine. Some considerations in regard to diagnosis. Treatment, operative removal.

"Conservative Treatment of Acute Appendicitis" was the subject of the paper by Dr. A. W. Morton, San Francisco.

1—The history of the disease. 2—The cause, defective drainage and infection. 3—The practical division, acute and chronic. 4—The local symptoms are essential in making diagnosis. 5—The constitutional symptoms confirm diagnosis, and guide in selecting time for operation. 6—Leukocytes above 20,000, indicates effusion of pus into abdominal cavity, and patient should not be operated on until pus is washed off, which will be indicated by diminished leukocytosis and constitutional symptoms subsiding. 7—Operate early in the disease, or when the constitutional symptoms are good. 8—Advocates Oschner's treatment of rest. 9—Compares statistics of Oschner, with Deaver Richardson and Broca. 10—Report of 43 acute cases with two deaths.

Dr. Wallace I. Terry's subject was, "Cases of Acute Suppurative Appendicitis, Treated by the Oschner Plan."

Patients should be operated on between attacks, or after an acute attack with rupture has quieted down, and pus is walled off. Absolute rest of abdomen should be secured, and no liquid be given by the mouth. A small sip of water may develop dangerous peristalsis.

"Appendicitis: Some Points in its Diagnosis and Treatment from the Viewpoint that its Cause is a Strangulation Produced by Distention Behind a Ball Valve," by Dr. C. Van Zwalenburg, Riverside.

Presentation of specimens of appendicitis produced in dogs by ligation and distention. Temporary obstruction and distention the cause of mild attacks. Weighing probability of obstruction continuing or having given way. Value of study of pain and tenderness. Determination of time when appendicitis becomes peritonitis. Being at outset a strangulation, treatment should then be by operation. Compared to strangulated hernia. Settle question of operation within first few hours. Disastrous policy of "waiting to see how patient gets on." Operate before peritonitis occurs or do not operate at all. Follow Oschner's plan.

Dr. Andrew J. Lobingier, Los Angeles, commented on the clear explanation of the Oschner method, and believed he was misunderstood. Commented on omission to mention work of Deaver and Oschner. Final settlement will be on middle ground and not extreme. Views of all are really not wide apart. Briefly discussed the theory of Dr. Von Zwalenburg, with which he did not agree.

Dr. J. Henry Barbat, San Francisco: Anatomical position of appendix gives rise to protean symptoms. The question of operation is a matter of judgment. No man's treatment as a hard and fast rule is going to be always best; use common sense. Perforation of the tip is the worst, and causes most fatalities. So-called acute cases are but manifestations of chronic condition.

Dr. Jules Rosenstirn, San Francisco, called attention to the danger of drawing off gas by needle thrust through the abdominal wall. That method has been abandoned by most surgeons. Danger from pressure on heart, or heart death, and for this lavage of the stomach is the best thing.

Dr. LeMoyné Willis, Los Angeles, thinks Deaver and Oschner are not misunderstood, and do not agree.

Dr. Harry M. Sherman, San Francisco, remarked that Oschner says when he is in doubt he waits.

Dr. Carl Krone, Oakland, spoke of physiology and development of the appendix. No special function for appendix, and it must be subject to retro-development.

Dr. George A. Hare, Fresno, thought radicalism bad, and agreed with Dr. Barbat that good common sense was more valuable than anything else. Cold as means of arresting peristalsis very valuable.

Dr. W. F. B. Wakefield, San Francisco, said that complete inhibition of peristalsis may be secured by use of calcium chlorid.

Dr. Emmet Rixford, San Francisco, thought complication reported by him more common than generally believed. He endorsed the method of Oschner. Be careful in counting cases, especially cases of perforation.

Dr. Morton said that statistics quoted by Dr. Lobingier included all cases; the real death rate would be higher—about 14 per cent. Deaver and Oschner are not agreed. Barbat is right—use common sense.

Dr. Terry responded that Oschner has made his mark, while Deaver's loss drops from 14 to 4 per cent.

Dr. Von Zwalenburg made some further remarks in support of the theory which he had presented.

"Intestinal Obstruction; With Report of Three Unusual Cases," by Dr. Charles D. Lockwood, Los Angeles.

Importance of early diagnosis; the fate of patients suffering with acute intestinal obstruction is largely determined in the first forty-eight hours. Resume of 1000 patients with acute obstruction operated upon since 1888. High rate of mortality is discouraging and does not add luster to surgical achievement. Diagnosis: Improvement must come through early diagnosis and operation, rather than through improved technic. Most important aids to early diagnosis: 1. Leukocytosis; 2. History of peritoneal inflammation; 3. Abdominal pain and reflex vomiting. Case 1. Strangulated diaphragmatic hernia induced by vomiting in the course of acute appendicitis. Case 2. Adherent Meckel's diverticulum associated with acute appendicitis. Case 3. Obstruction due to peritoneal band with some unusual features.

Discussion by Drs. F. L. Adams, W. I. Terry and Claire W. Murphy.

"Some Mechanical Aspects of Scoliosis and Demonstration of Apparatus," by Dr. James T. Watkins, San Francisco.

The normal spine is subject to the laws governing flexible rods. Side bending and rotation are always associated. The character of the rotation depends upon the anatomical configuration of the spinal segment in which rotation occurs. The changes present in a scoliotic spine can be produced in a normal spine by side bending from the flexed position. Simple curves in flexible columns might be cured by exercises and appropriate posturing. Compound and fixed curves do not respond to such treatment, because untwisting one segment increases the twist in the other segment. A fixed curve is no longer a part of a flexible rod, therefore, force exerted on it will be dissipated in the adjacent mobile portion of the column. Demonstration of Wullstein's apparatus for overcoming these difficulties.

Dr. P. C. H. Pahl, Los Angeles, commented on perfections of the apparatus demonstrated. Pled for earlier treatment of scoliosis; if taken before ten or twelve years of age is more easily treated and remedied. Danger from sending children to a brace maker; the child should be carefully studied; cast should not be left on for longer than 10 days. Put patients to bed and keep them out of sight; much better to make hospital cases of all such cases of scoliosis.

Dr. S. J. Hunkin, San Francisco, said that in theory the argument is based on things that are not so; the dorsal vertebrae are wider from before backwards. Cannot get hyperextension of dorsal vertebrae. Cited a case where two jackets reduced a very marked costal lump.

Dr. Harry M. Sherman thought it possible to secure extension of the dorsal spine.

Dr. Watkins, in closing, thought it no advantage to anesthetize patient; the machine does quite well enough.

"Congenital Dislocation of the Hip," by Dr. P. C. H. Pahl, Los Angeles.

Introduction. Definition. Cause. Statistics by Leonhardt Rosenfeldt of Nuremberg, including frequency, associated congenital and acquired deformities. Diagnosis: Inspection, Palpation and X-Ray Examination. Treatment by Hyprocates, Brabaz, Reijer, Pacl, Heusner, Hoffa, Schede, Post of Boston and Lorenz. The report of three cases operated on by Prof. Lorenz in Los Angeles, California, 1902, presenting anatomical results. Conclusions: Operation can only be considered successful where stability is unquestioned and the antiversion is not excessive. Unless these conditions exist, there should be a supplementary bloody operation; tearing of adductors should be superseded by prolonged stretching or spliced myotomy. Scoliosis, a serious complication, requiring early treatment.

Dr. S. J. Hunkin said he was much interested in the report, for it showed result in Lorenz's cases; they are all failures. Result successful only when head of femur is put in acetabulum and remains there.

Afternoon Session.

"Echinococcus of the Liver with Report of a Case," by Dr. Claire W. Murphy, Los Angeles.

Its cause. Its frequency in the United States and Canada. Description of the cyst wall and its membranes. The contained fluid. The termination of a cyst. Oftentimes not suspected during life. In whom found. Length of time growing. Few symptoms produced. Hydatid fremitus. Differentiation from other diseased conditions in the abdomen. Treatment. The necessity of removing the daughter cyst.

Dr. C. D. Lockwood, Los Angeles, said diagnosis is difficult, for trouble may be confused with the conditions men-

tioned by Dr. Murphy. He cited two cases where diagnosis was much confused, and empyema suspected. The treatment is well recognized and unquestioned.

Dr. Dudley Tait, San Francisco, said that Dr. Murphy is quite mistaken as to infrequency. The most unfaithful way to estimate is to consult books and journals and ignore reports of societies. Personally he had reported three. Diagnosis in cardiac surface of liver is generally overlooked, and effusion suspected. If hydatid cyst exists there will be marked deformity. Aspiration is dangerous, unless it is the first steps of radical operation. Delbe's method is to remove the entire cyst and a part of the liver tissue, and then dry and close with sutures. No adhesions follow on the site of incision. This is a matter of daily experience.

Dr. W. L. Terry said that the suggestion made by Surgeon Rhodes is very good. Exploratory operation to locate abscess or cyst, and then operation for removal. Subsequent operation is then very satisfactorily performed. This method should be of use with cysts as well as abscesses.

Dr. Murphy, in closing, was glad to acknowledge the value of the criticism and suggestions.

"Surgical Anatomy of the Inguinal Canal," by Dr. Claire W. Murphy, Los Angeles.

The walls of the canal. How best to open the canal, and where to open it. Why Bassini's operation is the best. The round ligament can always be found.

Dr. LeMoyné Willis said the difficulty lies in too many things and operations being recommended. Conditions and indications must be met and not some man's operation.

Dr. J. Henry Barbat said that he tells his students not to do anybody's operation, but close up the hole. Sew the tendons to Poupart's ligament, place the cord where it belongs, do the work well, and the result will be satisfactory.

Dr. Geo. A. Hare, Fresno, was glad to know there is always a round ligament. We should not continue to blame nature for our own mistakes. Alexander operation is not good, and is a back number.

Dr. A. S. Lobingier, Los Angeles, said he was glad to know round ligaments can always be found. The Alexander operation he considered one of the best we have and can use. It is well to enter the inguinal space from above, as suggested by Dr. Willis. No particular stress upon making three or four sutures; adapt to the conditions. "Faulty technic" may really be faulty material.

Dr. W. I. Terry approved of Barbat's suggestion to suit the operation to case and conditions.

Dr. O. O. Witherbee, Los Angeles, said in view of the fact that suppuration so often occurs, we should simplify the operation as much as possible. Should not be only a few men doing such operations, for any man who knows enough ought to be able to do them. Sutures remaining in a wound may give rise to minor trouble. Simplify operations as much as possible and encourage every man to do them. A wound may become infected in many ways. Do not multiply names of operations or parts. Avoid pressure as far as possible; close the wound as usual, but do not tie down on the skin; bring the sutures out a little distance away and attach to some framework that will hold it safely and not produce pressure. Young subjects absorb catgut very much better than older ones. Use an aluminum plate with perforations for easy placing and tying sutures.

Dr. Murphy, in closing, said he had little to add; he preferred the Bassini operation and always used buried sutures.

"A Case of Trigeminal Neuralgia, Presenting Some Unusual Features, Treated by Intraneural Injections of Osmic Acid," by Dr. T. C. McCleave, Berkeley.

Introduction of method by Bennett, 1899, consisting of exposure of nerves at foramina of exit and injection of 1½ per cent solution osmic acid into nerve substance. Sixteen cases cured by Bennett and Murphy. Present case twelve years duration. All kinds treatment, including two nerve-cutting operations; no benefit. Pain extremely severe on right side. Also milder pain on left. Two operations, first, typical one of Bennett, in which true condition of nerves not discovered. Relief only in supra-orbital branch. Second, disclose neuromatous condition of other branches, which were then injected and portions resected. Apparent cure. Discussion of probable spinal origin of pain in a bilateral case. Even if so, justification for operation.

Dr. H. M. Sherman had struggled with cases of this sort and considered it very valuable suggestion and a process to be tried before Cesarean ganglion operation is to be undertaken. Asked for information as to changes in nerve that follow the injection. Cited a case in which section of the nerve had been performed, resulting in loss of sensation, but no stopping of pain. On later removing the ganglion sensation was lost but pain continued. Pain probably due to tabes or bony tumor. It will be necessary to ascertain the action of the acid.

Dr. H. G. Thomas, Oakland, had examined nasal cavities and antrum and they were all right.

Dr. McCleave said Dr. Murphy is having animal experiments made, but is not ready to report; the experiments seem to show, however, that the acid acts on the nerve and destroys it slowly. Sensation seems to return after a time. In the case cited by Dr. Sherman, pain was probably due to central origin.

"Uretero-Cystotomy, with Report of a Case," by Dr. J. Henry Barbat, San Francisco.

Operation first done by Tauffer in 1877. Since then about 120 times. Ureter cut intentionally or accidentally during course of vaginal or abdominal operations, or during childbirth. Difficulty of implanting ureter into bladder through vagina; preference of abdominal routes. Unusual number of reported successes due to failure to report non-successes. Technic must be simple and not followed by contraction of cut end of ureter. Technic adopted by author after numerous experiments on dogs. Ureter split for one centimeter and flaps drawn into small incision in bladder by sutures, peritoneum of bladder incised and sutured over lower end of ureter. Anchor sutures to prevent traction on point of union. Report of case.

Dr. Dudley Tait, San Francisco, in discussion, said it was a pleasure to work with a surgeon of the Barbat type; good to have an operation worked out of the whole cloth and not merely be an adaptation. Animal operations are essential to perfect operations of this sort. German operations are awkward. The v-shaped cut was first used by Navarro, of Italy, but not used in this class of cases. We should consider ascending infection; it is more rapid and frequent in men than in dogs. The ureter is not only a passage for urine, but the lower end must protect the kidneys from ascending flow.

Dr. Geo. L. Eaton, San Francisco, said the total quantity collected for three to four months is important feature. Claire Smith of Seattle experimented on dogs, cutting out portion of ureter; later found atrophy of kidney on side of vesiculated ureter.

Dr. F. B. Carpenter, San Francisco, reported two cases of operation for replacing ureters, a section of which had been taken out. He had examined both ureters and the urine flows freely and equally from both. In one case, split ureter into three pieces instead of two, and operation was quite successful.

Dr. Barbat, in closing discussion, said the flaps stay long enough inside bladder wall to permit of adhesions. Tough tissues are brought into close approximation and held closely in place, so leakage does not occur. Back flow of urine is unimportant; back travel of infection is important. It is easy to draw the kidney down.

"Report of Case of Scleroderma Diffusa and Sclerodactylia; Its Clinical Aspect, Treatment, Postmortem Findings and Histopathology," by Dr. Alfred B. Grosse, San Francisco.

March 25, 1901. C. W., age 51 years. Skin of finger thin and parchment-like; muscles rigid; fingers flexed; forearms swollen and indurated. Motor function somewhat impaired. Skin and muscles of the face and scalp hard and indurated. Thighs, legs and feet involved in the process. This condition quickly progressed until nearly the whole skin became involved. Treatment: Salicylates, massage, constant current, thyroid extract, thiosinamin injections, arsenic and K. I. were used without result. April 30, 1902. Suicide with cyanide of potassium. Postmortem by Dr. Ryfkogel. Skin shows diffuse leathery thickening and all other organs show a peculiar hardness and seem gritty on section. Histopathology: Shows marked general increase of connective tissue and a well marked arteritis obliterans in the vessels of the skin.

Dr. Geo. Blumer, San Francisco, had seen six or seven cases, and recently an autopsy in which the conditions were much the same. Thinks it purely scleroderma and not sclerodactylia. There are changes in the bones of the hands in sclerodactylia.

Dr. Grosse said in conclusion, that at postmortem he did not take bones of hands, as should have been done. Bones were undoubtedly shortened. There was no marked endostitis obliterans as is generally regarded as an essential.

HOUSE OF DELEGATES.

At the evening session Tuesday, April 19, the new constitution and by-laws was considered, section by section, and, with but few minor alterations, was adopted.

Riverside was selected as the place for holding the next annual meeting.

The following was the result of election for officers for the ensuing year:

President, Frank L. Adams, Oakland; first vice-president, W. T. Lucas, Santa Maria; second vice-

president, W. W. Beckett, Los Angeles; secretary, Philip Mills Jones, San Francisco; assistant secretaries, T. C. McCleave, W. F. Barbat.

For Board of Examiners, Drs. Dudley Tait, W. S. Thorne, San Francisco; J. C. King, Banning; George F. Reinhardt, Berkeley; A. L. Cothran, San Jose. Alternates, Drs. R. F. Rooney, Auburn; C. E. Lockwood, Pasadena; C. A. Dozier, San Francisco.

Councillors—at large: Drs. F. B. Carpenter, George H. Evans, San Francisco; F. C. E. Mattison, Pasadena. From districts: Drs. C. G. Kenyon, San Francisco; A. S. Parker, Riverside; H. Bert. Ellis, Los Angeles; T. C. Edwards, Salinas; George A. Hare, Fresno; J. Lambert Asay, San Jose; E. M. Ewer, Oakland; Thomas Ross, Sacramento, and A. H. Mays, Sausalito.

Committee on Scientific Program—Drs. Wallace I. Terry, San Francisco; Geo. L. Cole, Los Angeles; C. Van Zwalenburg, Riverside; J. C. King, Banning.

Committee on Medical Education and Legislation—Drs. J. R. Haynes, Los Angeles; F. B. Carpenter, San Francisco; C. C. Wadsworth, San Francisco.

At the meeting of the Councillors, held Thursday morning, Dr. Kenyon was elected chairman, and Dr. George H. Evans, clerk.

PHYSICIAN'S POSITION IN THE BODY POLITIC.

PRESIDENT'S ADDRESS.

(Continued from page 145.)

In appending the bibliography, the writer wishes to acknowledge the free use of two articles on "The Doctor in Politics"—one by Dr. John B. Roberts of Philadelphia, read before the American Academy of Medicine, and the other delivered by Dr. C. A. L. Reed before the Kansas City Physicians.

POLITICS IN MEDICINE.

Quaint Examples of Medical Men in Other Walks of Life.....*Medicine*

PUBLIC HEALTH.

American Public Health Association in Indianapolis, *Educa.* 22:237; City's Health: Living Conditions, Daniel, A. S.; *Munic. A.* 2:247; City's Health: Sanitary Construction, Wingate, C. F.; *Munic. A.* 2:261; Dust as a Factor in Disease, *Pub. O.* 30:495; Health of a City, *Sci. Am.* 89:264; Immigration Menace to the Public Health, Powderly, T. V.; *No. Am.* 175:53; Local Government Board and Dr. Scott, *Tebb; Westm.* 156:306; National Government and the Public Health, *No. Am.* 165:733, *R. of R.* 17:97; National Public Health Legislation, *No. Am.* 167:627, *Pub. O.* 25:684; Needful Improvements in the Public Health Service, *Sanitarian* 51:293 (Oct. 1903); Organized Effort in Behalf of the Public Health, *Sanitarian* 51:481 (Dec. 1903); Progress and Achievements of Hygiene, *Science N. S.* 6:789; Raising the Level of Health in Cities, *World's Work* 5:2711; Sand Filtration and the Death Rate, *Curr. Lit.* 32:164; Untidy Streets and Disease, *Sci. Am. S.* 54:22385.

SANITATION.

Bacteria Beds of Modern Sanitation, Priestly, E.; *Liv. Age* 229:496; Field of Municipal Hygiene, Jordan, E. O.; *Pop. Sci. M.* 63:132; Municipal Sanitation, *Westm.* 157:197; Quarantine and Sanitation, Wyman, W.; *Forum* 26:684; Sanitation and Social Progress, Allen, W. H.; *Am. Jol. Soc.* 8:631; Sanitary Administration of London, *Ann. Am. Acad.* 17:54; Sanitary Cleaning of Galveston, *Engin. M.* 21:456; Sanitary Condition of Pekin, *Pub. O.* 30:490; Sanitary Condition of Street Cars, *Sci. Am.* 86:306; Sanitary Condition of Street Cars in N. Y., *Sci. Am. S.* 53:22018; Sanitary Ills Disclosed by Hull House Workers, *Char. R.* 10:587; Sanitary Science and Preventive Medicine, *Sanitary Rec.* 32:133; (July 30, 1903).

CONTAGIOUS DISEASES, EPIDEMICS, ETC.

Contagion and Quarantine, White, Dr. J. H.; *Munic. A.* 2:286; Contagious Diseases, *Harp. B.* 34:656; How Cleveland Stamped Out Smallpox, Flower, B. O.; *Arena* 27:426; Municipal Suppression of Infection and Contagion, Lederle, E. J.; *No. Am.* 174:769; Prevention of the Spread of Consumption, *Ann. Am. Acad.* 17:377; Sanitation and Yellow Fever in Havana, *Sanitarian* 47:13 (July 1901); Sanitary Measures in Europe to Prevent the Spread of Plague, *Ind.* 49:340; Scientific Prevention of Yellow Fever, Doty, A. H.; *No. Am.* 167:681; Tuberculosis and Public Action, *Fortn.* 77:700.

GARBAGE.

Disposal of House Refuse in Bradford, *Sci. Am. S.* 51:21104; End of the Fifth Theory of Disease, Chapin, C. V.; *Pop. Sci. Mo.* 60:233; Garbage Disposal, *Engin. M.* 13:392; *Engin. M.* 14:493; New York's Crematory for Light Refuse, *Sci. Am.* 86:328; Practical Cremation of Garbage, *Engin. M.* 24:270; Risk of Disease from Garbage Gathering, *Sci. Am. S.* 51:21033; Town Refuse Disposal in Great Britain, Goodrich, W. F.; *Cassier*, 21:59.

SEWERS.

Disposal of Sewerage, *Sci. Am. S.* 45:18743; Full Solution of the Sewage Problem, Scott-Moncrieff, W. D.; *Sanitarian* 51:385 (Nov. 1903); New Departure in Sewage Treatment, *Engin. M.* 12:855; Purification of Sewage and Water, *Edin. R.* 188:151; River Pollution and Sewage Purification, *Sanitarian* 48:116 (Feb. 1902); Royal Com. on Sewage Disposal, *Sanitary Record* 33:50 (Jan. 21, 1904); Sewage and Typhoid, *Sat. Rev.* 84:414.

HYGIENE IN SCHOOLS.

Certain Failures in School Hygiene, *Forum* 31:619; Hygiene as a Factor in Education, *Ed. Rev.* 24:391; Hygiene of Instruction in Primary Schools, *Jol. Ed.* 48:95; Medical Inspection of Schools, *Educa.* 18:460; Plea for the Teaching of Sanitary Science in Our Schools, *Educa.* 17:266; Relation of School and College to Health, *School R.* 11:817; Teaching of Hygiene and Sanitary Science in the Secondary Schools, *School R.* 6:65.

"PUBLIC BUILDINGS.

Care of School Buildings, *Outl.* 62:734; Healthful Buildings, *Engin. M.* 14:864; Housing Conditions, *Munic. A.* 6:333; Improved Tenement Houses for Am. Cities, *Munic. A.* 1:745; Overcrowding, *Munic. A.* 2:254; Sanitary Equipment and Power Plant of a Modern Lodging House, *Sci. A. S.* 50:20676.

MENTAL AND PHYSICAL DEVELOPMENT.

Arrested Development, *Educa.* 22:202; Highways of Mental Growth in Childhood, *Ind.* 53:87; Mental Development in Man, *Sci. Am. S.* 44:18320; Physical Conditions in Education, *Educa.* 18:451; Physical Degeneracy, *Sanitarian* 51:289 (Oct. 1903); Physical Education in Schools, *Blackm.* 165:573; Physical Factor in Public Education, Willard, E. C.; *Forum* 25:311.

MEDICAL LAW AND EDUCATION.

Better Training for Law and Medicine, *Educa.* R. 16:49; Drift of Modern Medicine, *Ecl. M.* 64:621; Forgotten Factor in Medical Education, *Educa. R.* 15:79; Medical Degrees in Germany, *Sci. Am. S.* 51:20941; Medical Practice and Law, *Forum* 31:542; Medical Progress, *Ind.* 49:79, (Jan. 21-97); Progress of Medical Education in the U. S., *Sci. Am. S.* 45:18499, (Mar. 5-98); Recent Activities in Medical Education, *Science N. S.* 8:631; Restrictive Medical Education and the Public, *Arena*, 19:784; Social Conditions in America in Their Relation to Medical Progress and Disease, *Sanitarian*, 51:3, (July, 1903).

PERSONALS.

Dr. H. D'Arcy Power has gone to England on a visit to his former home.

Dr. D. McC. Gedge, with his family, has gone for an extended stay in Europe.

Dr. Fred Williams has moved from Parlier, Fresno County, to Selma, and is now associated with Dr. Gilbreath.

Sir Knight Dr. C. G. Kenyon is to have direction of the hospital arrangements during the September convalesce of the Knights Templar.

Dr. O. W. Steinwand, in writing from Selma, states that the town has adopted a new health ordinance, providing for the regular inspection of milk and market products, by himself, as Health Officer, for which work he was voted a salary (?) of \$30 per month.

Changes of address, San Francisco: Dr. Wm. D. McCarthy, from 117 Twelfth Street to Inverness Building, Mason Street; Dr. W. M. Dickie, 402 Hayes to Inverness Building; Dr. H. Herrington, 467 Geary to 21 Powell; Dr. Harry Partridge, 233 Geary to 3050 Twenty-second Street.

PRESCRIBING PROPRIETARIES.

The practice of prescribing proprietary remedies by their trade name is not to be commended. The writer is cognizant of two patients for whom their physician prescribed a popular proprietary remedy by its trade name, with the result that both patients purchased the remedy of their own accord, omitted to consult their physician, used it with the usual indiscretion in such cases, and fell victims to its effects; in the one case it was the active agent in inducing melancholia that ended in suicide, and in the other it was a factor in producing general paresis with its physical and mental degradations.—(Bayley, in *N. Y. State Journal of Medicine*.)

SANITARY CONFERENCE.

Second Annual Meeting of the State, County and Municipal Body.

The conference convened at Paso Robles, at 10 o'clock Monday, April 18, and also held afternoon and evening sessions.

After a speech of welcome by Dr. Regensburger, president of the State Board of Health, Dr. J. W. Ward of San Francisco read a paper on "Food Adulteration." Dr. George H. Evans of San Francisco, in discussing the paper, said that vicious adulteration of food products is very extensive and dangerous. "We may talk a great deal, and read many papers, but something practical and actual must be done. Something ought to be done to counteract the work of the lobby against the Heyburn bill. The most important matter is the organization of the medical profession. I would suggest that resolutions commending the Heyburn bill be drawn up and passed by this conference."

Dr. Von Adelung of Oakland said he must rise and move that a committee of three be appointed to draft resolutions commending the Heyburn bill, and forward same to Congress.

Dr. Philip Mills Jones referred to the Auxiliary Legislative Committee of the A. M. A., outlining the purposes and work of the committee, explaining that through this medium it is now possible to get direct and cooperative action on important legislative measures.

Dr. John Haynes of Los Angeles remarked that "boodle" is the strong thing in politics. Oregon had an excellent plan, allowing the people to introduce legislation by a seven per cent vote of the people. "We should pass a constitutional amendment permitting the people to vote upon such questions. Determined effort by medical men will permit of such an amendment, and will permit of proper pure food legislation."

Mr. Denicke of San Francisco: "This will be of no avail unless the manner of electing judges is changed. Our judges will not hold prisoners charged with these offenses, when brought before the bar. This should not be a State, but a National question. The federal courts are the only ones that can be relied upon."

Dr. LeMoyné Wills, Los Angeles, said in explanation that this conference wanted to draft a law giving the State Board of Health power to do something; at present it has no power.

The resolutions proposed by Drs. Evans and Von Adelung were passed.

Dr. Wills moved that all Representatives and Senators, and Senator Heyburn, be memorialized at once.

Dr. Simpson moved the appointment of a committee to draft a letter to be signed by everyone present.

"Sanitary Milk, from a Dairyman's Standpoint," was the title of a paper read by Mr. Pierce of Riverside, who referred to the value of lands in favored localities, and led up to the matter of producing good milk at a profit. He said the cost of keeping the best stock is no more than the cost of keeping poor, and good milk is in demand. Our climate is so good that herds should be in good health. All apparently sick cows should be at once removed. Holstein cattle are rugged and healthy and good milk and butter producers. The construction of barns is important; light, cleanliness and ventilation are important points. Most impurities get into milk after it leaves the cow and before it leaves the barn. The air in stables is one source of contagion. A pure water supply is important. Prompt and rapid cooling is very essential. As the proposition of a business man, he finds that it pays to produce the best.

In the discussion, Mr. Powers, Los Angeles, said: "If every dairyman would do as the reader, the problem would be solved. Too many people do not care for the quality of their milk product, but only for the money. There should be means provided for compelling these men to supply clean and sanitary milk. Milkers are often filthy and careless. They should be compelled to be clean. The first milk from the udder should be poured out; it contains the great majority of germs. I have milked cows in proper manner and the milk has stayed pure and sweet for ten to fourteen days. Inspection should be sufficient to insure clean work."

Dr. Philip Mills Jones, San Francisco, read, by request, the paper of Dr. Geo. H. Aiken, Fresno, on "Milk Supply and Sanitation of the Dairy."

Dr. Regensburger said it was simply murder to put out the sort of milk that is being supplied in many places. Most dairies are simply filthy and nasty beyond expression. The petty vendor should be done away with, but he will fight against any legislation.

Dr. L. M. Powers, Los Angeles, laid special stress on handling milk by improper persons, small dealers, etc. He reported the dissemination of diphtheria by a milk dealer in Los Angeles, the cultures coming from the throats of all the dairyman's family and the milker. Refilling bottles is a very dangerous thing and it is hard to catch the drivers doing it.

Dr. George H. Evans, San Francisco, had investigated but could find no dealer supplying good milk or keeping a proper dairy, and was surprised and pleased to hear the paper of Mr. Pierce and learn there was one proper dairy, at least, in the State. Boards of Health should look also for bacteria and not make chemical composition the only standard.

Dr. Wills, Los Angeles, said the public wants cheap milk, and does not care about impurities. Legislation will do no good in curing the evil. Some prosecutions can be forced.

Dr. Simpson of San Jose said the dairy furnishing the infected milk at Stanford was largely patronized, and people urged the health officer to permit the dairyman to continue selling milk. Typhoid contagion of both the well and milk were undoubted.

Dr. Philip Mills Jones called attention to the Department of Agriculture report on milk supplies of cities. No legislation seems to offer so much promise of relief as the plan of certification of properly conducted dairies and milk coming within reasonable standards.

At the afternoon session, Dr. Von Adelung discussed vaccination, and exhibited packages of virus from various sources of supply, and commented on their relative merits.

"Practical Disinfection," by Dr. W. Simpson, San Jose, and "Quarantine in Smallpox," by Dr. L. M. Power, Los Angeles, were papers covering these important subjects very fully.

The balance of the program was as follows, but owing to demand on the JOURNAL's pages no abstract of the subjects discussed can be made in this issue:

"Collection and Registration of Vital Statistics," by Dr. O. Stansbury, Chico; "Medical Legislation," by Hon. W. I. Foley, Los Angeles; "Pollution of Public Water Supplies," by Dr. Thos. Ross, Sacramento; "Prevention of Tuberculosis," by Dr. C. C. Browning, Highland; "Medical Examination of School Children," by Dr. Mary R. Butin, Madera.

After the program was concluded at the evening session, a business meeting was held, at which Dr. LeMoyné Wills of Los Angeles was elected president of the conference.

COUNTY MEDICAL SOCIETIES.

Alameda County.

The Alameda County Medical Association held its regular meeting Tuesday evening, April 12. The meeting was called to order at 8:30 by the newly elected president, Dr. Jeremiah Maher, thirty-six members being present.

Dr. J. F. Lilley entertained the Society by reading an interesting paper in which he reviewed some of the notes taken by him during a post-graduate course in New York, about a year ago. The paper dealt in a very concise way with many of the ordinary diseases, and mentioned the main points in the treatment of the same as given by the specialists in each particular disease. In conclusion, the doctor described a method of treating hydrocele that he had used in eighteen cases with uniform success. This consists in the complete emptying of the sac by means of a trocar, followed by the injection of one or two drachms of pure carbolic acid, which was left in the sac. The advantages claimed for this operation are that no anesthetic is required; it can be done in the office; there is no retention from business, and it offers a complete cure.

The paper was fully discussed by Dr. Emerson, who took some exceptions to the treatment of hydrocele by the injection of carbolic acid, claiming that it is inadvisable to use this drug where its effects cannot be seen, there being considerable danger of causing sloughing of the tissues. He cited a case in which sloughing of the entire scrotum took place as a result of such an injection.

During executive session, a motion was made and carried to the effect that the Alameda County Association of Nurses be invited to hold its meeting in the Medical Society's rooms.

J. M. SHANNON, A. S. KELLY, Publication Com.

Kern County.

At the March meeting of the Kern County Medical Association the following resolutions were passed:

Whereas, The advertising, in our journals, of secret remedies, or the publication therein of recommendations of secret remedies or of trade-marked medicines of unknown composition is detrimental to the best interests of the medical profession, and in direct violation of the ethics of the profession, be it

Resolved, That the Kern County Medical Association, in regular meeting assembled, heartily commend and approve the position taken by the CALIFORNIA STATE JOURNAL OF MEDICINE in refusing to publish such advertisements and recommendations, and, be it further

Resolved, That these resolutions be spread upon the minutes of the Association and a copy sent to the editor of the CALIFORNIA STATE JOURNAL OF MEDICINE.

W. S. FOWLER, Secretary.

Los Angeles County.

On Friday evening, March 4, 1904, the Los Angeles County Medical Association held its regular meeting.

The first paper of the evening was read by Dr. F. M. Pottenger on "Specific Medication in Pulmonary Tuberculosis," in which he said, "The theme of every paper dealing with the treatment of tuberculosis should be that tuberculosis is a curable disease; the most curable of all chronic maladies. The claims of tuberculin and its allies to be considered as specifics is based upon their peculiar selective action which they have upon tubercular tissues, when injected into organisms affected with the disease. In 1,100 cases of incipient pulmonary tuberculosis tabulated by the

writer 20 per cent more patients were cured by the use of culture products than those treated by ordinary means. These remedies are only of value in tuberculosis, they must not be expected to combat a mixed infection or a case of pneumonia, nor must they be expected to replace the dead and dying tissue, which has resulted from the complications of the advanced stages of this disease. Specific remedies, no matter in what disease used, should be reinforced by every other measure of recognized worth. In tuberculin and its allies in early and non-febrile cases, and streptolytic serum in mixed infection, we have remedies, which, when added to ordinary common sense measures, remove much of the cloud hanging over this misunderstood and neglected disease, and prove it to be amenable to treatment and capable of cure in a large percentage of cases."

Dr. C. W. Seeber read the second paper on "The Treatment of Pneumonia." He said that of all things most necessary an abundance of fresh air is the desideratum in this disease. The patient's position should be frequently changed. The carbonate of creosote has acted as nearly as a specific as any drug in any other disease with which he was familiar. He begins with 15 minims, repeats it every two hours until two drachms are taken and then at three hour intervals until the temperature falls to 102°, after which time he gives about a drachm in the 24 hours until the patient is comparatively well. He also uses strychnia in sufficient doses to improve the heart's action, and relies chiefly upon coffee as a stimulant. He says, "I rarely give cough preparations of any kind, and as to external applications, I seldom use them."

The Los Angeles County Medical Association held its regular meeting on Friday evening, March 18, 1904.

Dr. E. M. Lazard read a paper on "The Localization of the Placental Site," in which he gave Professor Leopold's rules for locating the placenta as follows:

If the tubes converge upward on the anterior uterine wall to the fundus, the site of the placenta is the posterior uterine wall; if, however, the tubes assume approximately parallel courses along the sides of the uterus, the placenta is situated anteriorly. The courses of the tubes are marked in the following manner: First, the round ligaments are palpated with the palmar surfaces of the index, middle and ring fingers and are followed up to their insertions in the uterus, then the courses of the tubes are followed to their extremities and are marked on the abdominal wall with blue pencil. The left tube is more easily palpated. In Caesarean section, it is desirable to know whether the placenta is situated anteriorly, and to avoid cutting into it if possible.

Dr. John C. Ferbert read a paper on "Placenta Previa." He called attention to the difficulty of diagnosing this condition before labor, and spoke of the fact that text-books on obstetrics all recommend the vaginal tampon in treatment, with which he took exception, saying that a better method would be to note the amount of blood lost at each contraction of the uterus; if not severe enough to cause alarm, to do nothing, but if sufficient to cause anxiety to perform version by the Braxton Hicks method. If this cannot be done dilate at once and bring down a leg, after which labor can be terminated as seems best. He condemned the tampon because it did not control bleeding, concealing the condition only, and also on account of the increased danger of sepsis.

The Los Angeles County Medical Association held its regular meeting on April 1, 1904.

Dr. Kate Wilde read a paper on "The Difficulties that Present Themselves at the Onset of Lung and In-

testinal Troubles in Young Children." She called attention to the great necessity of having sick children in a Children's Hospital, and where this was not possible, a chart should always be kept and the symptoms carefully noted for the physician. The secretions from the lungs should not be allowed to be swallowed. Intestinal irrigation should be used. Food should be carefully given. The child's position should be changed from time to time. The child should not be waked at night for nourishment or medicine unless there be a condition present that requires stimulation. In the case of a breast-fed baby the mother's health should be carefully looked after. She says, "Always think of a beginning cold as a possible broncho-pneumonia, and treat every case of intestinal disturbance with as much care as a beginning typhoid, and you will avoid shoals."

Dr. F. O. Yost next read a paper on "The Place of Coal-Tar Antipyretics in the Therapeutics of Childhood." Among other things he said that when to the pyrexia in the diseases of childhood is added an excessively rapid pulse, delirium, dry mucous membranes, diminished kidney action, or threatened convulsions, it is evident that we should take active measures to reduce the temperature. In many cases we find it convenient and sufficiently safe to resort to the fever-reducing drugs, and by far the most reliable and effective drugs for this purpose are the coal-tar products. Beside the antipyretic action of these remedies, their analgesic and calmative effect are of great value. In the majority of sthenic fevers they are beneficial, especially if the course of the disease is naturally brief. But in asthenic cases, or those in which the toxemia is profound, we should avoid the coal tars.

The last paper of the evening was read by Dr. E. R. Bradley, on "Two Toxins Too Commonly Used," in which he deprecated the too free use of santalin, calling attention to its being a very common constituent of proprietary remedies for worms, and reported a case of acute poisoning by this drug in a child 2½ years of age. He also expressed the belief that the fumes of tobacco are harmful to infants, some children being more susceptible to it than others, and reported a case in a child aged 14 months, in which, after careful observation, both he and the parents were confident that the fumes of the father's cigars had acted as a toxin to the child.

JOS. M. KING, Secretary.

Merced County.

The Merced County Medical Society held its regular meeting in Merced, at the office of Dr. E. S. O'Brien, on the evening of April 7. There was a good attendance, and the meeting was an interesting and profitable one.

Dr. O'Brien prepared the paper for the evening's discussion, taking for his subject, "The Menopause," which he handled in a very clear and practical way, drawing from a large fund of personal experience. One of the chief points of the paper was that we should always insist upon a thorough examination whenever a patient shows any abnormality in the menstrual flow.

W. E. LILLEY, Secretary.

Orange County.

At the regular meeting of the Orange County Medical Association, held in Santa Ana, April 4, the following officers were elected for the ensuing year: President, Dr. F. E. Wilson, Westminster; vice-president, Dr. R. A. Cushman, Santa Ana; secretary, Dr. H. S. Gordon, Santa Ana; treasurer, Dr. J. R. Medlock, Santa Ana; librarian, Dr. F. M. Bruner, Santa Ana.

Dr. C. D. Ball read the paper of the evening, his

subject being "Hyperchlorhydria." The paper was evidently the outgrowth of careful study. After advocating a carefully restricted diet as the only cure for this condition, the Doctor invited those present to partake of oysters, salads, cakes and coffee, thus assuring them that he did not mean what he said in his paper, so far as his guests were concerned.

H. S. GORDON, Secretary.

San Benito County.

The San Benito County Medical Society met in regular session on April 4, in the offices of Dr. G. C. Porter, with Dr. J. H. Tebbetts in the chair. Roll call showed four members absent, those present being Drs. J. H. Tebbetts, R. W. O'Bannon, G. C. Porter, J. D. Ball, F. O. Nash and J. M. O'Donnell.

The subject of "Typhoid Fever" was thoroughly discussed, the etiology and pathology having been assigned to Dr. J. D. Ball, symptoms to G. C. Porter, diagnosis and prognosis to Dr. L. C. Hull, and treatment to Dr. R. W. O'Bannon.

On motion, a committee of three was appointed consisting of R. W. O'Bannon, G. C. Porter and J. D. Ball, to draft a set of resolutions commending the stand which Editor Dr. Philip Mills Jones has taken in reference to the advertisement of secret remedies or medicines.

Pneumonia (Lobar) was selected as the topic of discussion for the next meeting.

J. M. O'DONNELL, Secretary.

San Francisco County.

The regular monthly meeting of the San Francisco County Medical Society was held in their rooms on Tuesday evening, April 12, the president, Dr. J. Rosentirn, in the chair.

The Committee on Admissions reported favorably on the following applications for membership: A. S. Adler, R. H. Ashby, P. A. Bill, Geo. I. Bluhm, Geo. T. Brady, Peder Brugiere, R. Cadwallader, George R. Carson, E. P. Driscoll, Henry W. Gibbons, Chas. D. Gleason, Calvin L. Gregory, D. A. Hodghead, J. O. Hirschfelder, Calvin W. Knowles, Sophia B. Kobicke, Otto Laist, Joseph P. LeFevre, George Painter, H. G. Plymire, W. P. Head, G. H. Richardson, Harry P. Robarts, John Robertson, Thos. W. Serviss, Driesbach Smith, H. O. Von der Lieth, Jos. von Werthern, A. H. Voorhies, A. S. Weiss, Alanson Weeks, Otto F. Westefeld, Thomas W. Williams, Herman F. Wilson.

The Committee on Ethics submitted the following report:

The attention of the Committee on Ethics has been called, by a member of the Society, to the recent organization in San Francisco of a mutual medical aid society known as the "San Francisco Medical Aid Society," whose members are furnished with medical attention and medicines for themselves and their entire families for one dollar a month. The society publishes a pamphlet setting forth the plan of organization and the advantages of membership and giving on the title page the names of a number of members of the San Francisco County Medical Society as the medical staff. Two pages are then devoted to enumerating a partial list of the diseases for which treatment in the acute stage only is given. The question has been raised whether the use of the names of physicians who are members of the County Medical Society in connection with the advertising matter of institutions of the kind is not a breach of medical ethics.

Your committee has gone very generally into the question of contract services of physicians employed by these societies, by organizations of a social nature and by institutions supported by tax upon the employees of large corporations existing in communities where medical services can be easily obtained.

It is the opinion of this committee that all forms of contract services are subject to great abuses and that they are neither conducive to the welfare of the patient nor compatible with the dignity of the medical profession; second, that there is a constant tendency

to commercialism in such enterprises at the expense of the medical profession and to the detriment of the public evidenced by the formation of the society mentioned above; third, that this society (The San Francisco Medical Aid Society) is a purely commercial enterprise; fourth, that in advertising the treatment of a list of ailments in connection with the names of physicians, a breach of the principles of medical ethics outlined in Section 7, Chapter 2, of the Revised Code, has been committed.

It is manifestly impossible to correct all of the abuses of this kind already existing in San Francisco, yet your committee are unanimously agreed that even the best of these institutions have conducted to a lowering of ethical standards. Therefore, in order that this society shall put itself on record as being opposed to contract medical service, and in order to prevent, if possible, in the future use of the names of medical men in the advertising of any of these institutions, the committee offers the following resolution:

Resolved, That it shall be contrary to the By-Laws of the San Francisco County Medical Society that any member thereof shall permit his name to be used in connection with the printed advertising matter issued by or authorized by any institution, society or lodge founded upon the principle of mutual medical aid, and that the By-Laws be amended in accordance therewith. Philip King Brown, Albert Cohen, Emmet Rixford, D. A. Stapler, Committee.

Dr. Philip King Brown, chairman, also offered the following resolutions:

Resolution No. 1.

Be it resolved, That the San Francisco County Medical Society, in regular session, approves, endorses and commends the policy of the CALIFORNIA STATE JOURNAL OF MEDICINE in excluding from its pages all advertisements of remedies or preparations of unknown composition, and all mention of or reference to them in the scientific papers published.

Resolution No. 2.

Whereas, The proper, conscientious and intelligent practice of medicine demands that the physician shall know the composition, quantity and therapeutic action of all such medicine, medicines or medicinal preparations as he prescribes, dispenses or recommends in the treatment of the sick, and

Whereas, The use of secret medicines, medicinal preparations, nostrums, etc., has been declared to be unethical by the American Medical Association and the Medical Society of the State of California, therefore, be it

Resolved, That it is the sense of this Society that legitimate pharmacy, as distinguished from the commercial drug store in which all varieties of secret proprietary preparations and nostrums, etc., are sold and recommended, should be encouraged and helped by the proper support of the medical profession. And to this end, be it further

Resolved, That a committee of three be appointed to devise ways and means whereby legitimate pharmacy may be stimulated and the druggists of this city and county may be persuaded to desist from the practice of carrying, selling, dispensing or recommending all secret proprietary preparations, nostrums, etc.

Resolution No. 3.

The following by-law is presented to the Society: No member of this Society shall permit his name to be used in connection with the printed advertising matter issued by or authorized by any institution, society or lodge founded upon the principle of mutual medical aid.

The resolutions were taken up serially and unanimously passed, in the case of No. 2 the president announcing that he would appoint the committee within a day or two. In the matter of change in by-laws, as proposed in No. 3, under the rules further action was laid over for one month.

The special committee appointed to draft a minute on the death of Dr. Charles H. Roese, reported as follows:

We, the members of the County Medical Society of San Francisco, conscious of the great loss we have sustained by the death of our honored member, Chas. H. Roese, and desirous of expressing our feelings of high esteem for the deceased, be it hereby

Resolved, That by the death of Dr. Chas. H. Roese, this organization in particular, and the community generally, have lost a valuable member of our profession, who gave great promise of a useful and distinguished career for the future.

Resolved, That we acknowledge his loss with profound sorrow and tender his widow our deeply felt sympathy and condolence in this her hour of great bereavement.

Resolved, That these resolutions be inscribed in our minutes, and a copy thereof be transmitted to the widow of our deceased colleague.

Martin Krotoszyner, E. O. Jellinek, Max Salomon, Committee.

The president appointed Drs. A. W. Perry and J. B. Frankenheimer a committee to prepare a minute on the death of Dr. Thomas B. DeWitt.

The president announced the death of former president, Dr. Louis A. Kengla, and appointed Drs. F. B. Carpenter, George H. Evans and Philip Mills Jones a committee to prepare suitable resolutions.

On account of increase in membership it was announced that the Society was entitled to additional representation at the coming meeting of the State Society, and upon ballot the following were elected: Drs. Frank Dray, S. J. Hunkin, Philip King Brown, and C. S. G. Nagel.

On motion, the delegates to the meeting of the State Society were instructed to advocate action by the State Society toward securing the next meeting of the American Medical Association in San Francisco.

The scientific program consisted of demonstrations of pathological specimen, by Dr. A. L. Fisher; "Tendon Transplantation," patient presented, Dr. S. J. Hunkin; "On the Use of Alkalis and Antacids in Gastric Diseases," Dr. A. W. Perry; "On X-Ray and Use of Static Machine," Dr. J. C. Gregory, U. S. A.

Dr. Fischer presented specimen giving the following history:

The specimen demonstrated is one obtained from a man aged 43. On admittance to the Mount Zion Hospital the man complained of pain in the upper portion of the abdomen. The family history was negative. In the personal history we found that nineteen years ago he had had stomach trouble with pain and tenderness with some vomiting and loss of appetite. He recovered from this entirely. There was no further trouble for nine years. Ten years ago he had attacks of pain in the upper portion of the abdomen. He would get these attacks every few months. They would last a few days, or a week. There was great pain in the upper portion of the abdomen. These attacks lasted for ten years. The present illness began two weeks before admission to the hospital. There was more pain than usual. Great pain in the upper portion of the abdomen. It was found that he was very much emaciated. There was nothing in the chest or reflexes. The abdomen showed a movable mass in the upper right quadrant, about three finger breadths below the costal margin, continuous with the liver. Dullness was found over this area. The hemoglobin was 30 per cent red, blood count over two million, diminished acid in stomach analysis. Urination normal. Operation was advised. On the second day the patient passed blood in the stools. He had two or three tarry movements every day for the next few days. Continued to have severe pain, and after five days decided to permit operation. An incision was made along the outer border of the right rectus showing that the stomach was densely adherent to the liver about the region where the gastro hepatic ligament should be. The gall bladder could hardly be made out. The adhesions were separated and a gastro enterotomy thought to be done on account of the relation of the stomach and liver, but the condition was such that it was not attempted. The abdomen was closed and the man sent back to the ward. He continued to have these pains, and gradually sank. Tarry stools, hemoglobin 18 per cent. He died about one month after the operation. Complete autopsy was not allowed, but we managed to remove this mass of tissue. It is most of the stomach, duodenum and a portion of the liver. When taken from the body, the relations could not be made out. It was seen that there was an out-pocketing from the duodenum. Seen also that there was an opening immediately from the gall bladder into the duodenum and that the liver was exposed. Evidently gastric ulcer that had perforated posteriorly around the region of the cystic duct, and probably the cystic duct had been digested away. The specimen is presented because it is very rare. The duodenal ulceration occurs in about one in 250 autopsies. This has been described about nine times. This connection of the duodenum with the gall bladder has never been described, as far as I can learn. There are several cases on record in which there has been an opening from the duodenum into the gall bladder, but in this case the cystic duct remained. Here the cystic duct has been apparently digested away. The liver is at the bottom of the ulcer. Gall bladder opening immediately into the duodenum. At the time of the operation ulcer was suspected from the arrangement of the stomach and liver.

Dr. Rosenstirn, discussing the specimen presented by Dr. Fischer:

The adhesions were adhesions extending from the large curvature to the surface of the liver, and they formed a sort of kink of the pyloric portion of the dilated stomach so that by severing these adhesions a better physical formation of the outlet of the stomach was obtained and we thought that perhaps part of the reason of dilation of the stomach was coming from these adhesions in preventing a free emptying of the stomach through the biliary opening. At the same time we suspected an ulceration of the duodenum, and also thought that the liver formed the base of the ulceration. We were only prevented in making the gastro-enterotomy through the condition of the patient. We thought afterward that by rectal feeding and absolute rest we might get the patient into condition to perform the operation. The wound healed by first intention, but the patient gradually sank.

Dr. Stunsky: "I saw the patient before entering the hospital, and saw him in an attack of pain, which was pronounced a very severe attack of hepatic colic. They thought he had gall stones."

Dr. Weiss, discussing paper by Dr. Perry:

In some forms of hyperacidity we may frequently apply acids without avail, and I find that the administrations of bromide, especially the strontium bromide, is followed by excellent results. It seems that the pouring of HCl into the stomach in increased amounts often gives the result of neurosis or hyperesthesia. This may be a theoretical explanation of the good action of bromide.

Dr. Perry: "I did not recommend these substances in acidity of the stomach, but only wish to state what is the use of one or the other. I am far from recommending the use of antacid in cases of hyperacidity."

Dr. Sherman, discussing paper by Dr. Hunkin:

This paper has been one of great interest to me, because I think that Dr. Hunkin and I began our work in this line about the same time. We worked through a period of hopefulness and disappointment. The disappointment lay in the fact that we were planting live muscles on the dead tendons. The function of the live muscle was lost. The change from that was to transpose the live muscles to insertions of their own, and, if possible, with their own tendons. I think it was all of five or six years ago that, in trying to do that, I used silk as a method of elongating the tendon, ignorant of anybody else's work. The operation was a failure for reasons which I do not understand. The silk is still in that boy unaffected. As far as the method of transplantation is concerned that is all I have to say, because the use of a silk string in place of the tendons I have had no personal experience with. My patient is not ready to have the splints taken off. As regards the rest of Dr. Hunkin's paper, I do not know exactly how to say what I want to say. I cannot agree with his statements, and I think that the case which he brings here this evening disproves his theory. To say that a muscle does simply as the brain wishes it, would throw aside all the terminology of the neurologists, all of the anatomy of the anatomists, and would make us believe that any one part of our bodies could be made to do almost any other function than that for which it was intended. If it is true that the flexor can become an extensor, and not an extensor from cerebral impulse, but an extensor automatically, then why is it that a certain portion of the brain can have its function suspended by a little clot or the pressure of a piece of bone or an abscess. If there is anything at all in cerebral localization, the same rule must work through the whole nervous system. It is impossible to think that a flexor can become automatically an extensor. In proof, let us take this child. If you seat this child on the table with the leg hanging down, the non-paralyzed child will kick the leg. The paralyzed child lets it swing out. It looks as if it were active when it is paralyzed. Taylor, of New York, brings that out in cases of Lorenz operations for hip trouble. With a child with quadriceps extensor paralysis, he lets it swing out. The same way a child on a table or bed learns to make use of the muscles whose natural function it is to make motions, and make it appear that they are making motions with their muscles which are paralyzed. This child, lying on the table, could be told to extend his leg, and if you had your finger on the gracilis you would find that contracts at the same time that the other did. When I sat him on the side of the table and supported his foot, I told him to kick his foot up, and held my finger on the gracilis tendon, and the tendon did not contract—did not make the motion of extension. When I told him to flex it, it did flex. I think that the boy does not yet differentiate. I think that if he ever does it will be by cerebral action and never by anatomical. It is unthinkable that a human being can so change the anatomy of his nervous system that he can reverse the action. The use of the silk is good, though my experience is limited to one case.

Dr. Watkins, discussing paper read by Dr. Hunkin:

I had the pleasure of calling attention to Lange's method of the subperiosteal implantation of healthy tendons last year at the meeting of the State Medical Society at Santa Barbara. At that time I reported the final results on six of his cases two years subsequent to operation. It seems to me that not enough cases have yet been operated upon by this method, nor has a sufficient time elapsed to permit of our speaking with anything approaching authority on the modifications which may or may not occur in the function of a muscle which has been transplanted. I am inclined to think that Lange's ideas are near the truth. He attempts to maintain the four independent motions of the foot, and to that end uses whole muscles, when he can get them, which are capable of independent action, expecting them to modify their functions to meet the exigencies of their new conditions. He does not hesitate to reverse the action of an independent muscle, if need be, however. Take for example the case where all the muscles are gone except the common flexor of the toes and the gastrocnemius. Lange carries the tendon of his common flexor to the front of the leg and attaches it to the dorsum of the foot and expects that it will antagonize the gastrocnemius in its new position, that is, it will become a dorsal flexor of the foot or the leg. I do not think that if one muscle of a group, which, acting together, perform a definite function, be transplanted, it will learn to contract independently of the rest of the group. Such a result would not correspond with Lange's findings. In several of Lange's cases the tibialis anticus had been split and the outer half inserted into the dorsum of the cuboid. I convinced myself that the transplanted part of this muscle acquired a new function—became a pronator of the foot, in fact. The method of examination I used, beside palpation, was to place the patient's leg and foot with their inner borders resting on the table, while I held the leg down and at the same time palpated the tendon; the patient was instructed to abduct his foot, that is, to raise it from the table. This, several patients were able to do. In no other muscle did I observe this phenomenon, nor does Lange report such. I repeat, the subject is too new and not sufficiently threshed out yet to admit of much more than speculation.

Dr. Frisbie, discussing paper read by Dr. Hunkin:

The case is very interesting to me. I have had no experience in these cases. It does seem as though it was demonstrated that it is possible to do it. The time is brief. It seems a revolution of all our ideas of how muscles should work and yet, after all, they are only the agents of the brain, and if the brain can educate them they may be made to do these things, reasoning about it as we please.

Dr. Carpenter, discussing case of Dr. Hunkin:

I wish to call attention to an article published in the *Journal of the A. M. A.* on nerve anastomosis. It strikes me as rather forcible in regard to these cases. An anastomosis was made between the paralyzed seventh nerve and the spinal accessory and the statement was made by the author that in the course of a few months or a year that the constant training of the new group of muscles was obtained. That is simply in harmony with the training of these muscles.

Dr. Barbat, discussing case of Dr. Hunkin:

The matter is only of the education of the muscle, and there is no doubt that if one part of the body is defective that naturally allows other parts to be educated to take the place and to function in the place of the part destroyed. A muscle if transplanted and trained by the individual will perform these functions after a while. The individual can educate that muscle, and it will go on and perform those functions in an automatic way.

Dr. Hunkin, closing discussion:

I rather expected the internal medicine man to take up this subject. There are quite a number of questions to be discussed about the nerve. I am not sure, but I think I remember that when the cerebral path is broken between the cerebrum and the parts of the body that the impulse does go by a new path. The Creator has made various paths outside of the direct one. We may say that a certain muscle was intended to do a certain action and nothing else. Well, I do not know that to be a fact, and I doubt if anyone else does. You take the flexor digitorum. It is one muscle, I can flex one finger without flexing the others. The part of that muscle must have learned to contract from other parts. It is true that a muscle contracts as a whole and with the group to which it belongs. So does the flexor digitorum, yet that muscle is able to differentiate its certain branch of fibers. In this boy, he could flex his knee. He must have been using the flexor muscle. The boy now can extend his knee. The muscle has turned over from flexor to extensor. It is extensor action that this boy has in this case.

Dr. Barbat, discussing Dr. Gregory's paper:

The doctor has gone very thoroughly into detail with regard to this apparatus. I do not think we can add anything, except a few little points which I have noticed. One little thing we will always notice; in order to become expert, you have to do a great deal of work. No one can become expert in a few days. I find that by first gauging the strength of my tube, I can determine the amount of strength it will stand. The average it will stand is 112 volts for a few seconds, except the extremely thin platinum tubes. The other tubes will stand full strength of the coil, and I have taken pictures, except stout people's abdomens, in three seconds. In children the pelvis in three seconds and the hand instantaneously. Of course the operator wants to be careful of the tube because the average platinum will heat up in from 2 to 3 seconds. With regard to the plates, by comparing one plate with another, I find the standard plate has given me the best satisfaction with regard to the length of exposure. With regard to developing plates I use weak solutions.

Dr. Hunkin, discussing paper read by Dr. Gregory:

The best picture I have seen taken was in Liverpool. There was used a solution of bichloride acid just three times the strength of the acid usually employed here.

Dr. Hubbell, discussing paper read by Dr. Gregory:

I have had considerable experience in this work and I have tested nearly all the plates on the market. I have tested them very thoroughly and I have gotten the most satisfactory results from the Cramer X-Ray plates. It is very evident to me that for X-Ray photography you require a certain character of emulsion. I believe it would be richer in silver than any ordinary photography.

Dr. Cooper, discussing paper read by Dr. Gregory:

I have been asked by two different clinics to look around for a static machine, and I have not found one which I would recommend them to use instead of the Queen coil. With regard to the photographs, I have been fortunate in them. I have one which shows a stone in the kidney. These were not taken instantaneously, but with 32-plate static machine. I find it does not matter much what machine is used; it depends upon the technic and the tube you get. If you get a good tube, that tube should be kept for the kind of work it is being used for.

San Joaquin County.

The San Joaquin County Medical Society is showing unusual interest in Society meetings this year. We now have thirty-one members and hope soon, by the addition of adjacent county members, to increase our membership materially.

At the February meeting, Dr. R. R. Hammond read an interesting paper on "Haematuria." The paper was freely discussed. The Doctor reported the following interesting case:

Mr. E. McL., aged 36, complained of passing blood in his urine for the last two months. The urine was normal in amount, passed freely and was voided without any pain or inconvenience to the patient. The prostate, urethra, and bladder were carefully examined. His family history was negative. The patient was in first-class condition, attending to his professional duties as usual, no temperature, night sweats, appetite good.

Microscopical examination showed the urine to be filled with red blood corpuscles, a few white, and one or two casts, with a number of epithelium cells.

On the evening of February 26, two days after I had first been consulted, and two months from the beginning of the trouble, I was sent for, and found the patient suffering intense pain in the back, running down into the groin and radiating into the testicle. His wife told me that that morning the urine voided was almost pure blood; the pain began later and gradually increased in severity. I gave a hypodermic of morph. sulph. grs. 1-2, and atrop. sulph. grs. 1-150. The patient had a fairly comfortable night and the next morning passed several very small calculi, the urine was still bloody, but in three days was clear and has been ever since.

The next meeting will be held at the office of Dr. E. Harbert.

The Society met at the office of Dr. E. Harbert on Friday evening, March 25.

Dr. Harbert read a paper on "A Case of Gallstones," the report being received with much interest.

The Society will meet next month at the residence of Dr. A. W. Hoisholt.

BARTON J. POWELL, Secretary.

Santa Barbara County.

The Santa Barbara County Medical Society held its regular monthly meeting in the parlor of the Arlington Hotel, April 13, 1904, the president, Dr. Charles Anderson, in the chair. Drs. Charles Anderson, Wm. F. Blake, W. B. Cunnane, W. H. Flint, L. F. Mansfield, H. Sidebotham and C. E. Vaughan answered to roll call.

Dr. Blake reported a case of fracture of the tibia and fibula extending into the ankle joint, treated by adhesive strapping and molded pasteboard splint.

The paper of the evening, "Pernicious Malarial Fever," was read by Dr. Blake. Notwithstanding the fact that malaria is absolutely unknown in Santa Barbara or vicinity, the Doctor's paper, accompanied by a report of two cases, excited a great deal of interest; it was an exchange of reminiscences of the experiences of the various members acquired in other climes in the misty past, and was enjoyed very much. A motion was made and carried thanking Dr. Blake for his able paper.

An application for membership by H. C. Bagby was read and referred to the proper committee.

On motion of Dr. W. H. Flint, seconded by Dr. C. E. Vaughan, Dr. C. B. Bates was elected to honorary non-resident membership.

On motion of Dr. Cunnane, seconded by Dr. C. E. Vaughan, Dr. W. T. Lucas was elected second alternate delegate to represent the Association at the meeting of the State Society in case the regular delegate, Dr. Charles Anderson, or alternate, Dr. D. A. Conrad, should be unable to attend.

The report of Dr. C. E. Vaughan, chairman of the committee appointed for the purpose of drafting appropriate resolutions respecting the death of Dr. R. Mackinlay received, and on motion was adopted:

Resolved: That the members of the Santa Barbara County Medical Society wish to offer as a last tribute of love and respect to the memory of the late Dr. Robert Mackinlay. Although his failing strength debarred Dr. Mackinlay from taking part in the recent reorganization of this Society, the older members will remember his unflagging interest in its welfare in former days. He was bound to us by ties of personal friendship and professional comradeship. We respected him as a man, admired him as a physician and loved him as a friend.

The medical profession has lost a wise, skillful, conscientious and sympathetic practitioner, and the community a member who was faithful to every public and private obligation. In every relation of his life his record stands without a blemish.

To the family of our late associate, we offer our deep sympathy.

Resolved: That a copy of these resolutions be presented to the family of our late associate, and that they be published in the "Santa Barbara Press" and "The Daily News."

Dr. W. H. Flint offered the following resolution, which was adopted:

Resolved: That the members of the Santa Barbara County Medical Society having carefully considered the provisions of House Bill 6295, entitled, "A Bill for Preventing the Adulteration or Misbranding of Foods or Drugs and for Regulating Traffic Therein, and for Other Purposes," as amended by the Senate Committee on Manufactures, and now pending before the Senate (Calendar No. 1165), do hereby respectfully represent that the provisions of said bill are essential to the proper protection of the public welfare, and, consequently, hereby respectfully petition that the same be enacted into law at the earliest possible moment. All of which is respectfully submitted.

W. B. CUNNANE, Secretary.

Multiplication of Bulletins.—It is announced that bulletins of pathology are to be issued from the Medical Department of the University of California under the auspices of the Pathological Department. It is a matter of regret that original work of merit should continue to be published in special bulletins of small circulation. Excellent as such periodicals may be in themselves, their multiplication, for obvious reasons, is at the present time wholly inadvisable.—*Boston Medical and Surgical Journal.*

THE VALUE OF MUNICIPAL LABORATORIES.*

By FRANK PATERSON, M. D., San Jose.

AS NOTHING is of greater importance to the welfare of the inhabitants of a community than its health business, discussion of rational means of placing the same on a scientific and unselfish basis can never be untimely. The duty of carrying out this purpose must be assumed by those qualified by education and position to accomplish it. This involves primarily the physicians of the community. They, acting in concert with the official health body, and with the cooperation of the intelligent portion of the public, which latter, alas for the object, must be too often educated to the purpose, could do much that is not being done toward the eradication and prevention of disease.

However, to the end that the physicians of the community and the health officials might be enabled to more advantageously cooperate in the campaign against disease, and that factors having the most potent influence upon the public health might be investigated scientifically and independent of factional bias, every city of more than 10,000 inhabitants should be equipped with a municipal laboratory and employ the services of an efficient bacteriologist and chemist.

"It is to be regretted that the actual degree of usefulness of such institutions is too often made the shuttle-cock of local political conditions, but this stage can last only so long as the citizens continue to close their eyes to the part that might be played by the laboratory in securing and safeguarding the public health."†

To the matter of proper and thoroughgoing inspection of water, milk and food, sanitary conditions of schools, public buildings and conveyances, etc., the municipal laboratory constitutes an indispensable auxiliary. With more detailed reference to some of these things, it might be said that the water supply and drainage conditions should be subjected to regular and systematic inspection. The reasons for this need no elucidation and the role of the municipal laboratory is equally manifest.

The milk supply and its sources, when correctly controlled, have a direct bearing upon the infant mortality rate. While the laboratory would have in view the bacteriological condition and the detection of chemical adulteration and dilution or extension of the milk, the admittedly more important purpose of protecting the general character of the supply, through control of the dealers and producers, would be more thorough because of its agency. The experience in Eastern cities shows that dealers and producers as a class are rapidly awaking to the merits of scientific method and realization of the value of a certification of purity by competent health inspectors.

Further, in a city where an efficient system for the notification and control of infectious diseases is conducted, the laboratory is an absolute necessity. As nearly all the infectious diseases are most prevalent and most fatal among children at school age, a rigid system of medical inspection of schools is above all desirable. Here, again, the laboratory comes into service.

The acquisition and disbursement of means necessary for the establishment of such an institution should rest with or at least be under the supervision of representatives of a united and organized medical profession. It is a demonstrated fact that communities whose health business is established on a scientific and systematic foundation save annually thousands of dollars now spent in futile, because

unscientific, efforts to arrest disease, to say nothing of the saving of valuable lives and the equally valuable happiness that goes with health.

In truth, the preventable ills are legion, and they impose upon humanity countless evils which, under right education, for the most part should be averted. Preventive medicine must guard the lives and education of the people, particularly the young, so that future generations may not suffer from our neglect of imperative duty.

THE RAT AND HIS PARASITES; HIS ROLE IN THE SPREAD OF DISEASE, WITH SPECIAL REFERENCE TO BUBONIC PLAGUE.

By B. J. LLOYD, M. D., Asst. Surg. U. S. M. H. S.

(Continued from page 116.)

Contact with infected human beings being insufficient to account for the spread of the disease, we have to inquire in what way, then, does man become infected? This much we know: living plague bacilli must be brought in contact with the human body externally or internally, and while such contact does not always produce infection, it is sufficient in many instances. Direct inoculation subcutaneously, even with the slightest abrasion, such as is not infrequently produced by the nails, would, I have no doubt, result in infection in a very large per cent. of cases, even in those who live under the most favorable hygienic conditions. The mere contact of infective material, preferably plague tissue, rubbed on the unbroken skin of the guinea pig, is sufficient to infect in perhaps 90 per cent. of trials, and judging from the number of cases in man which certainly are infected through the skin and which present no cutaneous lesion, I have no doubt that man may be infected in the same way. Without going into details (and you may draw your own conclusions from observation and from the literature of the subject) I wish to state dogmatically that while infection does take place through the respiratory and gastro-intestinal tracts, and perhaps through the genito-urinary tract, *by far the greater number of persons are infected through the skin, either with or without a discoverable cutaneous lesion.* If this be true, then what may be the source of the bacillus and how does it reach the human body? In the pneumonic form, and in those cases where we have a *lymphangitis pestis* in the pulmonary lymphatics, the sputum is of course dangerous. Inasmuch as these cases are not very frequent, we are led to a discussion of "sources other than rats and human cases," rats being reserved for a separate consideration. I use the word source to mean any animal that may harbor the germ, or any material outside of the animal body that may contain living plague bacilli. The evidence here is very conflicting. Competent observers say that cats have the disease but do not die of it. Lorans in Mauritius

* Read before the Santa Clara County Society.

† Dr. Geo. M. Gould, in *American Medicine*.

states that in several cases he traced the infection in human beings to plague-stricken cats. These cats had discharging cervical buboes in which plague bacilli were found. The Australian authorities have reported one instance of a cat suffering from the disease. The Austrian Plague Commission succeeded in infecting three cats by feeding, and these all developed cervical buboes. Di Mattei points out that the excrement of such cats is infectious. I have no doubt that these observations are true, but it has not been demonstrated that cats are infected with sufficient frequency to be of very much importance, though it is just as well to remember these facts in dealing with plague. In one experiment I failed to infect a cat by feeding; but as to that matter, feeding experiments often fail in rats, which are highly susceptible. Dr. Boido states that dogs died of the disease in the recent outbreak in Mazatlan, and Yersin says that he has known dogs to die from biting infected rats. I know of one dog that did not die from such performance, though on the second day afterwards he was not feeling very well, but here again negative results do not mean anything. The Austrian Plague Commission states that the excrement of infected dogs is dangerous, and it seems to me that we cannot altogether ignore the dog. It is well known that monkeys are susceptible to pest infection, and they probably contract the disease in the same way that human beings do.

Various other domestic animals have been reported as suffering from or at least harboring the germs, but the evidence is not so conclusive. The following is from the *Journal of Tropical Medicine*:

It is with much satisfaction we see that the Hong Kong medical authorities are following up the conclusions arrived at by Professor Simpson as a result of his experiments and investigations into the causes of plague in Hong Kong, and that ample confirmation of these views is being obtained. The experiments demonstrated that pigs, calves, buffaloes, sheep, hens, ducks, geese, turkeys and pigeons were, in addition to rats, susceptible to plague, and particularly so when fed with plague material. * * * It appears that on May 31st one fowl was sent from the Western Market to the Public Mortuary, and on examination by the bacteriologist it was found to have died of plague. On June 1st a duck was sent and was also found to have died of plague. On June 2nd four ducks from the same market and one chicken were reported to have died of plague, and on June 3rd a quail was found to have died of plague. * * * Pigeons succumb to the disease.

The most improbable part of this story is the allegation that pigeons succumb to the disease. Bacteriologists the world over are practically a unit in attributing to the pigeon an unvarying immunity. In two experiments I inoculated pigeons with large quantities of a virulent bouillon culture, and after five and ten days respectively, I was unable to obtain the bacillus from any part of the body. Of the many pigeons I have

seen inoculated for the purpose of differentiating the bacillus pestis from the bacillus of chicken cholera (and this is just one of the several ways in which they differ), I have never seen one suffer the slightest inconvenience from inoculation with pest. References to domestic fowls in connection with plague are not infrequent in the works of older writers. Skene, in his Edinburgh essay on plague in 1568, says: "If the domesticall fowls become pestilential, it is ane signe of maist dangerous pest to follow." Creighton thinks that this observation has been borne out by more modern experience in Yun-nan. It may be possible that at the height of an epidemic of plague an increased virulence of the bacillus pestis, whatever an increase in virulence may mean, does enable it to become pathogenic for most of the domestic animals. At other times, the virulence of the bacillus may be so lowered that it will not produce the disease with such readiness, if at all, as it is well known that experimentally, at least, the virulence may be so lowered that it will not even kill mice, the most susceptible of all animals. If it is true that domestic animals under certain conditions harbor the germs and transmit them to man without the animal itself becoming ill, we can readily see that this is a matter of the utmost importance, as there is nothing so deadly as an enemy in ambush. The subject is one that will bear further investigation. A clipping from the *New York Sun*, purporting to be from the same source as the article from the *Journal of Tropical Medicine*, read as follows:

London, Oct. 17.—The recurrence of the bubonic plague every spring at Hong Kong, and the fact of its breaking out simultaneously at two or three unconnected neighborhoods, led Sir Henry Blake, the governor of the colony, to make experiments with the object of discovering the source of the disease.

A block of native houses containing several thousand inhabitants, which was certified as being free of plague, was selected for examination of vermin as the first step. The result was startling. Fleas, cockroaches and spiders were found to be unmistakably infected with the germs of the plague. The bite of these insects is sufficient to introduce the germ. A further test revealed a more disturbing source of infection in samples of blood taken from healthy inhabitants which were forwarded to the bacteriological department. Plague germs were discovered in at least 5 per cent. of these samples. Thus, in the hot season, each of these was a probable center of danger, although there was no apparent contact with the disease. The only cure seems to be the destruction of the native town and the erection of a new and clean one which can be kept under sanitary control.

Although the statement regarding the isolation of plague bacilli from the blood of healthy individuals seems almost absurd, or at least highly improbable, it is hinted at by one other English author whose statement is at least worthy of consideration. Thomson, from whose work I have already quoted liberally, in his "Treatise on Plague," says:

Let no one rashly conclude that any suspect is not a plague case because the temperature is normal and he has no bubo. A few cases have been recorded of plague appearing in the form of buboes without any constitutional affection. Plague cases vary very much in severity, and some are so mild that it is only by the appearance of a bubo that one can know the patient is attacked by this specific disease. In mild cases the diagnosis can only be made by the discovery of an inflamed and perhaps only slightly enlarged lymphatic gland, and by a bacteriological examination microscopically and by cultivation of the extracted matter from this gland.

It has been many times noted that medical men and other attendants on plague patients occasionally suffer from headache, malaise, anorexia and an inflamed or tender lymphatic gland at times, without being at all further inconvenienced or developing symptoms of plague such as are clinically met with. The case of the sweeper at Parel Hospital is an instance in point, and since then two fresh instances of a similar transient character have come to notice. Here the vital resistance of the healthy organism has been capable of resisting the inroads of the microbe. As in tuberculosis, it is known the microbes are very generally diffused and yet general infection of the whole populace does not follow. So in a plague epidemic it is scarcely possible that the germs are entirely absent from all dwellings in which plague cases do not occur. Free dilution with pure air seems to kill the plague germ readily.

What has been said of fleas and mosquitos will apply to flies and other vermin. Fomites have long been regarded as a source of transmission, and with apparent good reason. The theory that the plague bacillus has a saprophytic existence in the soil may be mentioned as a possibility.

We now come to the consideration of the rat in particular as a means of disseminating the germs of plague. The question often asked by sanitarians is, not whether the rat is concerned in the spread of the disease, but is he the only agency. It has already been shown that the disease may be transmitted in other ways. We have now to make out a case against the rat, and there should be no difficulty in convicting him as principal, the others being accessories. It is admitted that we are unable to state satisfactorily the way in which the germ passes from rat to man. If I should shoot a man in the street in the presence of credible witnesses, I do not think a jury would acquit me because they did not see the bullet enter his body. Competent evidence can be introduced to establish the following facts regarding rats and plague: Rat plague and human plague are identical. The spread of plague follows along the lines of migration of the rat, and not necessarily along the lines of travel of human beings unless rats accompany them, as on board ship. Plague produces a greater mortality among rats than among human beings. Plague almost invariably attacks the rats of a city before it appears in human beings. The first cases of plague in a city nearly always occur in a vicinity where infected rats have been found.

(To be concluded next month.)

DIED.

Dr. Charlotte Blake Brown, the pioneer woman physician of California, died in San Francisco on April 19, at the age of 57. She began the study of medicine with her brother, Dr. Charles Blake of San Francisco, and later completed her course in the Woman's Medical College of Philadelphia, returning here to practice. The Children's Hospital was organized by her, and for twenty years she was physician and surgeon there. Many of the local associations to relieve suffering humanity were planned and organized by Dr. Brown, who was the first woman here to practice surgery. She was one of the organizers of the Home for Feeble-Minded Children and the Associated Charities, and was an active worker for the bringing into existence of a State Board of Charities. She proposed the establishment of a training school for nurses, and has always opened the way for women where her own ability placed her in the lead. Dr. Brown was born in Philadelphia. She leaves a husband, Henry Adams Brown, three children, Dr. Adelaide Brown and Dr. Philip King Brown of this city, and Mrs. Harriet Darling of Brookline, Mass.

"LITERATURE."

Dr. Swan of New Haven relates that a professor in one of the larger universities collected the pieces of literature relating to "proprietarys" received during one year, and that they amounted to 424 separate items. Of this number only 54 could be classed as respectable, while the remaining 370 pieces related to remedies more or less secret in preparation, supported by weak journal articles, physicians' testimonials and commendations by the makers. This last class was supported by the testimonials of 1,780 physicians, 56 editors of ten-cent medical journals and 119 professors in mushroom medical schools.—(Bayley, in *N. Y. State Journal of Medicine*.)

PRESCRIBE INTELLIGENTLY.

Clinical experience has ever taught that it is wise to prescribe as few remedies as possible and to use no powerful drug without a distinct idea of what it is intended to do, and that to get the best effects from such a drug it should usually be given by itself. There is good reason to fear that today there is too frequent violation of this rule—due, perhaps, as much to carelessness as to a lack of knowledge.—(Purdy, in *N. Y. State Journal of Medicine*.)

GOOD COURSES AT SUMMER SESSION.

The summer school of the University of California will be in session from June 27th to August 6th, when some courses of interest to the medical profession will be given. Prof. S. A. Arrhenius, University of Stockholm, will give, in English, a course on the application of physical chemistry to serumtherapy, which will include his most recent and unpublished conclusions. Prof. William Ramsay, of London, will deliver a series of lectures on the recent developments in chemistry, illustrated by experiments on the behavior and properties of radium.

Plague case No. 119, bacteriologically confirmed, occurred at Concord, Contra Costa County, February 24. The patient was an Irish-American woman, age 39, and died February 29. The occurrence of the suspected disease was promptly reported, and at once investigated by Dr. B. J. Lloyd, P. H. and M. H. S. Every assistance was given by the attending physician, Dr. Neff, and by the local authorities.

Erratum—On page 122, April JOURNAL, seven lines from bottom of first column, the word "filling" should read "freeing."

SOME RECENT ADVANCES AND INVESTIGATIONS IN RHINOLOGY AND OTOTOLOGY.*

By LOUIS C. DEANE, M. D., San Francisco, Cal.

THE past year has been productive of some advances, in no way startling, it is true, but no less convincing, that there are a few, who, though taken up with the busy round of routine practice, still have the time and the patience to step forward and advance into new fields. It also takes courage, for who is there among us who does not look skeptically upon new advanced theories and methods, willing to brand the author who has the courage to stand his ground, as an extremist or a crank.

To Dr. Otto Freer (1) of Chicago, who, with his twenty-four personally devised instruments, desects up membranous flaps and resects large pieces of cartilage to correct septal deviations, we must pay our respects for his mature and possibly advanced technique. We may refrain from practicing his methods, fearing our own ability to work from one to two hours upon a deflected septum; not to speak of the courage and fortitude required by the patient. Still, the question as to the best method to employ for the correction of a deflected septum is a much discussed one. I have read with care the elaboration of a number of these methods. I have tried several but have invariably fallen back upon the rough and ready Asch operation as applicable to the greatest number of cases.

One drawback to the successful outcome of many operations is that while the cartilage of the septum has, through surgical interference, been replaced towards the median line, the anchors which largely held it in its deflected position remain intact; I mean its attachment to the perpendicular plate of the ethmoid, the vomer and the superior maxillary spine. These resist the pressure exerted by the splints and assist later in drawing the septum into its old and deflected position.

It has been my habit to attempt during the Asch operation to sever the attachment between the septum and the maxillary spine by fracture with crushing forceps. Beaman Douglass (2) of New York, has recently suggested a more technical method of obtaining this result by an incision under the upper lip, to the side of the raphe, and then with chisel and hammer detaching the spine from the floor of the nose. I have only had an opportunity to practice this method once, and while some difficulties of manipulation were encountered, I was able to push the septum over without resorting to any operation upon the triangular cartilage itself.

I cannot pass without mention of the treatment of atrophic rhinitis by the use of paraffine injections into the tissue covering the turbinate bodies. Broeckaert (3) speaks most favorably of this method and states without reserve that the time is approaching when we will count ozena as one of the curable diseases. The injection of paraffine seems to act first, mechanically, by reducing the size of the nasal cavity. Later the paraffine becomes permeated by young cells with the subsequent development of connective tissue. The epithelium takes on an active part in this regeneration, and the degenerated glands, so numerous in the atrophic mucous membrane, disappear; which explains the lessening of the secretion and odor.

The local and internal administration of Mucin is highly recommended by Wyle, Low (4), Stuart (4), Ambercrombie, and others. It comes in the form of tablets which, when mixed with lime water and

sterilized water, is applied in the nose. The tablets may also be taken internally. Let us hope that more may be heard from this, apparently valuable, new remedy.

Hay fever is of such rare occurrence on the Pacific Coast that it is unlikely that any of us will have much opportunity to use Professor Dunbar's (5) antitoxin. It is in line with the rapid strides which are being made in serum therapy and when such authorities as Sir Felix Semon (6), Emile Mayer (7), and McBride (8) report favorably upon its action, it is to be hoped that, in the coming year, we may be able to speak of it as a reliable remedy, a relief for the distressing symptoms accompanying hay fever.

The natural trend of operations upon the sinuses is the formation of formidable openings with radical surgical procedure; this is especially so of chronic inflammations involving the maxillary sinus. The efforts at seeking and irrigating through the natural orifices, the attempts at treating through an opening in the alveola process, or one made by Krause's curved canula from the inferior meatus, have been more or less abandoned for large openings through the canine fossa and lateral walls of the inferior and middle meatuses, as recommended and practiced by Onodi (9), Rethi (10), Luc (11), Curtis (12), Picque (13), Taurbet (13), and others.

While there are some who hold that in the electric bougie we have found a valuable remedy for stricture of the eustachian tube and diseases dependent thereon, prominent among whom is Dr. Ducloux of New York, I might say that its application is not easy, requiring some skill for the proper introduction of the bougie. When added to this fact it is noted that the first few attempts may not be followed by encouraging results, I am convinced that many who have tried this form of treatment have become disheartened. It certainly has its indications and is of unquestioned value in strictures of the eustachian tube, especially when due to a soft exudate near the isthmus. From my own experience with it, during the past three years, I can but conclude that its application, in osteo-sclerotic and catarrhal diseases of the middle ear, is useless.

To bar from serious consideration the treatment of chronic non-suppurative middle ear diseases by hot air, injected into the external auditory canal, would be to overlook one more method for the application of heat to the inflamed surfaces. Aside from the marvelous effect of dionin (ethyl-morphin hydrochlorate) upon the lymphatics of the eye, heat is the best lymphagogue we have, and one cannot but appreciate the logic of such an application. The use of heat in chronic forms of inflammation is already well established, as is shown by its marvelous effect upon chronic diseases of the joints, etc. As to its application in the ear, most of those who have used it report favorable results, especially its effect upon tinnitus; all suggest, though, the necessity for a course of continuous treatments extending over a number of months, which is often impracticable, but to be expected in chronic hyperplastic conditions. I believe we are justified in looking forward to improvement in its method of application. We are at present unable to determine the temperature of the air as it comes in contact with the drum and adjacent ossicles, or to accurately gauge it. It reminds one of the application of electricity without the use of a milliamperemeter.

During the past year, J. L. Goldstein (14), and especially R. Levy (15), and W. Milligan (16), have made extensive studies in the cause, effect and treatment of tuberculosis of the middle ear. Levy reports extensive researches and enumerates his conclusions upon this interesting, and I believe much overlooked,

*Read by title before the American Rhinological, Otolological and Laryngological Society, S. F., Feb. 27, 1904.

malady of the middle ear. Milligan points out that the objective symptoms are referable to the effects produced by the deposition of bacilli within the mucosa of the tympanic cavity and to the subsequent ulcerative effects which are hereby induced. Millary tubercles are deposited in the superficial layers of the mucosa, which appear as yellowish areas in a pearly gray membrane. They readily break down, forming ulcers, which produce extensive destruction.

Koerner's efforts at entering the attic and antrum through the external auditory canal cannot help but arouse our interest. The day may be near, with our increasing knowledge of these parts and improved technic, when this operation will not be considered as ill advised to avoid under certain conditions the more radical and disfiguring procedure against the mastoid cells. Its analogy to vaginal hysterectomy and ovariectomy is interesting.

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TENTH INTERNATIONAL CONGRESS OF OPHTHALMOLOGY.

The date of the next congress has been advanced a few days, in compliance with general request, and has now been fixed for the 14th, 15th, 16th and 17th of September, at Lucerne. The latest date for receiving manuscripts has been fixed at May 1st. Professor Pfluger died since the first circular was sent out, and Professor Siegrist, his successor at the University of Berne, has been appointed in his place. "Those colleagues wishing to secure accommodation at Lucerne beforehand, are advised to apply before the first of September to Dr. F. Stocker, president of the local Committee at Lucerne. He will engage for them a room at one of the best hotels (early breakfast included), at five francs a day each person."

The American Neurological Association has fixed the time of its meeting at St. Louis for September 15, 16, and 17; and this will be immediately followed by the sessions of the various medical departments of the Congress of Arts and Sciences, beginning September 19.

"Torticollis and Spinal Curvature Due to Eye-Strain," in which several interesting cases are reported, is the title of a paper by Dr. Geo. Gould in *American Medicine*.

Death From Wood Alcohol. "Mrs. Lillie Sullivan, of Baltimore, died as the result of drinking Jamaica ginger prepared with wood alcohol."—*Pharmaceutical Era*. At first blush one is tempted to condemn the dishonest manufacturer who uses wood alcohol in making his ginger. But this seems a hopeless task, so one had best condemn the poor woman who drank the concoction with such dire results.

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